

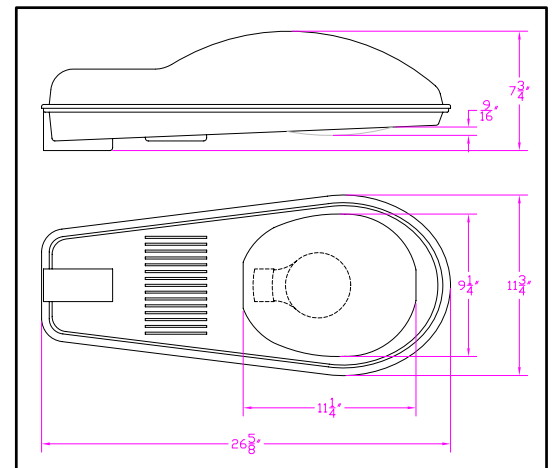
**IES ROAD REPORT
PHOTOMETRIC FILENAME : LLI110917A.IES**

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] LLI 1109-17A
 [TESTLAB] LIGHT LABORATORY INC
 [ISSUEDATE] 11/19/2009
 [MANUFAC] MHT LIGHTING
 [LUMCAT] MHTCH-55E
 [LUMINAIRE] 26-5/8"L. X 11-3/4"W. X 7-3/4"H. STREET LIGHT
 [MORE] HYDROFORM REFLECTOR WITH CLEAR TEMPERED DROP LENS
 [BALLASTCAT] MHT WJY55GH01
 [BALLAST] 120-277V 50/60Hz ELECTRONIC
 [LAMPPOSITION] 0,75
 [LAMPCAT] 55W INDUCTION LAMP
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
 [_INPUT] 277VAC, 59.2W

CHARACTERISTICS

IES Classification	Type I
Longitudinal Classification	Very Short
Cutoff Classification (deprecated)	Cutoff
Lumens Per Lamp	N.A. (absolute)
Total Lumens	N.A. (absolute)
Luminaire Lumens	2863
Total Luminaire Efficiency	N.A.
Downward Total Efficiency	N.A.
Upward Waste Light Ratio	0.00
Maximum Candela	1448
Maximum Candela Angle	55H 15V
Maximum Candela At 90 Degrees Vertical	13 (0.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	75 (2.6% Luminaire Lumens)
Total Luminaire Watts	59.2
Ballast Factor	1.00



IES ROAD REPORT
PHOTOMETRIC FILENAME : LLI110917A.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	405.6	0.0	14.2
FM - Front-Medium (30-60)	1044.5	0.0	36.5
FH - Front-High (60-80)	219.9	0.0	7.7
FVH - Front-Very High (80-90)	19.0	0.0	0.7
BL - Back-Low (0-30)	329.4	0.0	11.5
BM - Back-Medium (30-60)	693.8	0.0	24.2
BH - Back-High (60-80)	134.9	0.0	4.7
BVH - Back-Very High (80-90)	7.9	0.0	0.3
UL - Uplight-Low (90-100)	4.3	0.0	0.2
UH - Uplight-High (100-180)	3.6	0.0	0.1
Total	2862.9	0.0	100.0
BUG Rating	B1-U1-G1		

IES ROAD REPORT
PHOTOMETRIC FILENAME : LLI110917A.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>5</u>	<u>15</u>	<u>25</u>	<u>35</u>	<u>45</u>	<u>55</u>	<u>65</u>	<u>75</u>	<u>85</u>
0.0	1383	1383	1383	1383	1383	1383	1383	1383	1383	1383
5.0	1425	1425	1425	1426	1427	1426	1424	1419	1412	1402
15.0	1380	1380	1384	1393	1410	1433	1448	1448	1431	1401
25.0	1241	1241	1248	1267	1296	1329	1361	1364	1334	1263
35.0	998	1000	1016	1059	1105	1138	1153	1134	1085	1019
45.0	719	722	733	769	823	862	869	855	831	789
55.0	464	461	455	465	497	554	592	598	581	546
60.0	369	367	356	364	384	426	459	468	454	421
62.5	325	323	312	315	328	364	397	405	392	360
65.0	281	280	273	269	275	305	337	345	332	303
67.5	237	237	235	229	228	250	281	288	275	248
70.0	196	198	201	195	187	200	229	234	220	197
72.5	161	163	167	163	152	158	182	184	171	150
75.0	128	130	135	130	121	123	141	142	129	111
77.5	99	100	103	99	92	94	105	105	94	79
80.0	74	74	75	71	68	68	74	72	65	55
82.5	53	53	52	50	47	47	48	47	42	37
85.0	37	37	35	34	32	33	33	32	29	25
87.5	22	22	21	20	19	19	20	19	18	16
90.0	13	13	13	13	13	13	13	13	12	12
95.0	10	10	10	10	10	10	10	10	10	10
105.0	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>90</u>	<u>95</u>	<u>105</u>	<u>115</u>	<u>125</u>	<u>135</u>	<u>145</u>	<u>155</u>	<u>165</u>	<u>175</u>
0.0	1383	1383	1383	1383	1383	1383	1383	1383	1383	1383
5.0	1397	1391	1377	1362	1346	1331	1318	1307	1300	1296
15.0	1381	1359	1309	1249	1185	1126	1076	1041	1021	1012
25.0	1220	1176	1080	988	916	871	842	823	813	808
35.0	982	942	851	753	685	647	629	627	620	613
45.0	760	725	640	557	493	460	446	447	448	444
55.0	521	491	433	359	317	310	309	309	312	312
60.0	398	374	328	263	245	244	243	242	241	240
62.5	340	320	277	221	212	211	211	209	207	205
65.0	285	267	227	185	180	179	178	176	174	172
67.5	233	219	180	154	150	148	147	144	142	140
70.0	184	171	139	125	121	119	117	114	112	111
72.5	139	128	106	98	94	92	90	87	85	84
75.0	101	93	79	73	70	68	65	63	61	60
77.5	72	66	56	51	48	46	44	41	39	39
80.0	51	46	38	33	31	29	27	24	21	23
82.5	34	31	24	21	19	17	16	14	12	13
85.0	23	20	16	14	13	12	11	11	10	10
87.5	15	13	12	11	11	10	10	10	0	0

IES ROAD REPORT
PHOTOMETRIC FILENAME : LLI110917A.IES

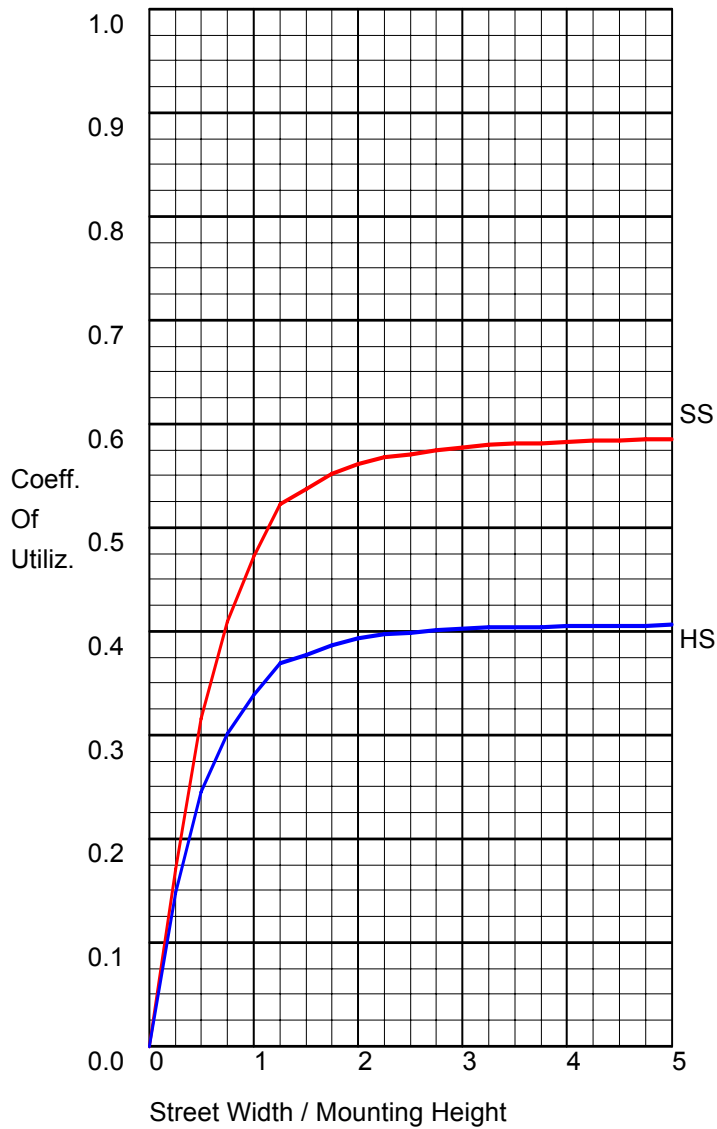
CANDELA TABULATION - (Cont.)

90.0	11	11	10	10	10	10	0	0	0	0
95.0	10	10	10	10	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles

	<u>180</u>
0.0	1383
5.0	1296
15.0	1011
25.0	807
35.0	612
45.0	443
55.0	312
60.0	240
62.5	205
65.0	171
67.5	140
70.0	110
72.5	83
75.0	60
77.5	39
80.0	24
82.5	12
85.0	10
87.5	0
90.0	0
95.0	0
105.0	0
115.0	0
125.0	0
135.0	0
145.0	0
155.0	0
165.0	0
175.0	0
180.0	0

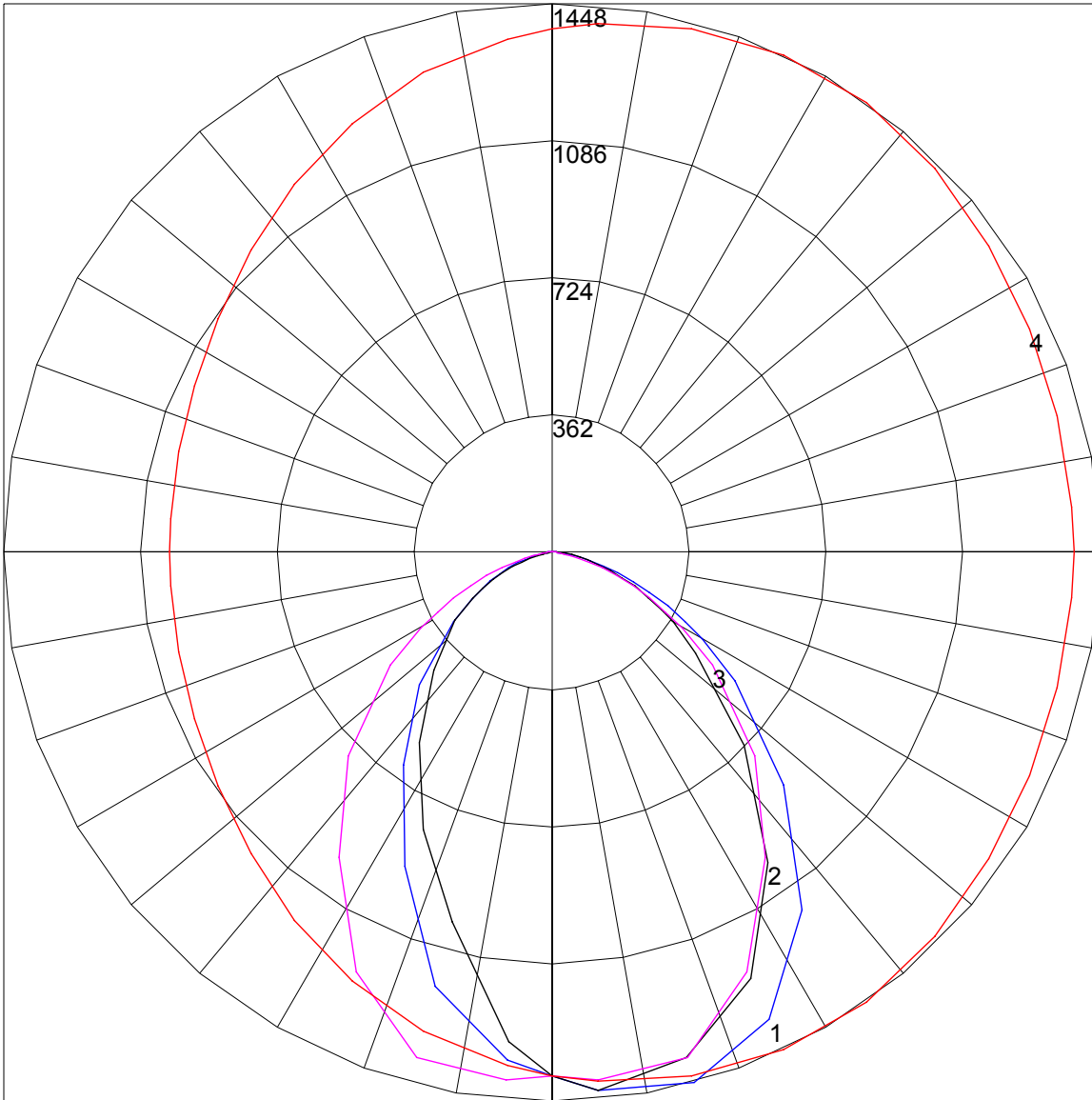
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Lamp
Downward Street Side	1688.9	N.A.
Downward House Side	1166.1	N.A.
Downward Total	2855.0	N.A.
Upward Street Side	5.8	N.A.
Upward House Side	2.1	N.A.
Upward Total	7.9	N.A.
Total Flux	2862.9	N.A.

POLAR GRAPH



Maximum Candela = 1448 Located At Horizontal Angle = 55, Vertical Angle = 15
1 - Vertical Plane Through Horizontal Angles (55 - 235) (Through Max. Cd.) : BLUE
2 - Vertical Plane Through Horizontal Angles (0 - 180) : BLACK
3 - Vertical Plane Through Horizontal Angles (90 - 270) : MAGENTA
4 - Horizontal Cone Through Vertical Angle (15) (Through Max. Cd.) : RED

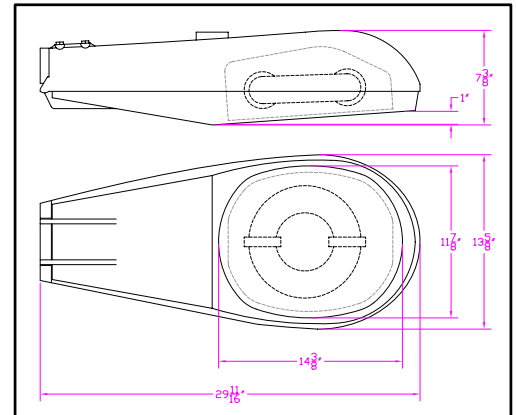
**IES ROAD REPORT
PHOTOMETRIC FILENAME : LLI110910A.IES**

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] LLI 1109-10A
 [TESTLAB] LIGHT LABORATORY INC
 [ISSUEDATE] 11/13/2009
 [MANUFAC] MHT LIGHTING
 [LUMCAT] MHTCH-100E
 [LUMINAIRE] 29-11/16"L. X 13-5/8"W. X 7-3/8"H. STREET LIGHT
 [MORE] ALUMINUM REFLECTOR
 [MORE] FLAT TEMPERED GLASS LENS
 [BALLASTCAT] MHT WJY100DH01
 [BALLAST] 120-277V 50/60Hz ELECTRONIC
 [LAMPPOSITION] 0,0
 [LAMPCAT] 100W INDUCTION LAMP
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
 [_INPUT] 277VAC, 100.2W

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Very Short
Cutoff Classification (deprecated)	Cutoff
Lumens Per Lamp	N.A. (absolute)
Total Lumens	N.A. (absolute)
Luminaire Lumens	4975
Total Luminaire Efficiency	N.A.
Downward Total Efficiency	N.A.
Upward Waste Light Ratio	0.00
Maximum Candela	1804
Maximum Candela Angle	85H 25V
Maximum Candela At 90 Degrees Vertical	18 (0.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	77 (1.5% Luminaire Lumens)
Total Luminaire Watts	100.2
Ballast Factor	1.00



IES ROAD REPORT
PHOTOMETRIC FILENAME : LLI110910A.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	489.3	0.0	9.8
FM - Front-Medium (30-60)	1748.7	0.0	35.1
FH - Front-High (60-80)	424.4	0.0	8.5
FVH - Front-Very High (80-90)	14.9	0.0	0.3
BL - Back-Low (0-30)	491.7	0.0	9.9
BM - Back-Medium (30-60)	1554.3	0.0	31.2
BH - Back-High (60-80)	237.3	0.0	4.8
BVH - Back-Very High (80-90)	10.0	0.0	0.2
UL - Uplight-Low (90-100)	4.3	0.0	0.1
UH - Uplight-High (100-180)	0.0	0.0	0.0
Total	4974.9	0.0	100.0
BUG Rating	B2-U1-G1		

IES ROAD REPORT
PHOTOMETRIC FILENAME : LLI110910A.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>5</u>	<u>15</u>	<u>25</u>	<u>35</u>	<u>45</u>	<u>55</u>	<u>65</u>	<u>75</u>	<u>85</u>
0.0	1743	1743	1743	1743	1743	1743	1743	1743	1743	1743
5.0	1681	1681	1684	1691	1699	1707	1714	1720	1726	1734
15.0	1587	1587	1592	1602	1618	1644	1677	1703	1720	1725
25.0	1491	1487	1479	1495	1568	1665	1744	1786	1800	1804
35.0	1337	1335	1322	1351	1422	1558	1681	1758	1786	1775
45.0	1253	1252	1243	1279	1374	1477	1526	1558	1542	1503
55.0	1129	1123	1113	1121	1153	1211	1244	1254	1201	1127
60.0	957	950	931	919	931	980	1004	997	943	870
62.5	839	835	820	803	805	843	853	838	793	725
65.0	715	709	699	679	667	693	693	673	632	578
67.5	582	580	568	546	527	540	534	510	477	433
70.0	451	448	433	411	392	395	383	358	331	296
72.5	327	324	310	285	268	267	250	225	196	181
75.0	221	218	196	183	170	164	148	129	115	103
77.5	137	135	127	111	100	90	80	69	62	58
80.0	77	76	72	63	54	48	43	38	37	37
82.5	41	40	39	35	30	27	27	28	29	28
85.0	28	28	28	25	23	23	23	23	23	22
87.5	20	20	20	20	20	20	20	20	20	18
90.0	18	18	18	17	17	17	15	15	15	15
95.0	0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>90</u>	<u>95</u>	<u>105</u>	<u>115</u>	<u>125</u>	<u>135</u>	<u>145</u>	<u>155</u>	<u>165</u>	<u>175</u>
0.0	1743	1743	1743	1743	1743	1743	1743	1743	1743	1743
5.0	1738	1740	1746	1752	1756	1759	1761	1761	1763	1764
15.0	1730	1735	1737	1730	1711	1689	1665	1640	1623	1618
25.0	1791	1774	1742	1711	1666	1607	1535	1480	1448	1421
35.0	1765	1754	1740	1706	1636	1504	1380	1321	1304	1296
45.0	1483	1471	1453	1438	1409	1307	1154	1099	1118	1138
55.0	1099	1091	1084	1056	994	877	760	719	718	735
60.0	839	824	794	762	704	610	529	504	506	505
62.5	696	678	640	602	549	478	417	401	403	403
65.0	551	532	489	449	406	358	316	304	306	311
67.5	412	393	351	316	285	257	230	221	221	226
70.0	279	266	234	202	191	170	154	149	148	149
72.5	171	163	146	133	120	105	96	94	93	91
75.0	98	93	84	75	67	59	54	52	52	50
77.5	56	53	46	38	34	31	29	28	29	28
80.0	36	35	30	28	24	22	22	21	21	21
82.5	28	26	23	22	20	20	19	19	18	18
85.0	21	21	20	20	18	17	16	15	15	15
87.5	17	16	15	15	15	15	15	15	15	15

IES ROAD REPORT
 PHOTOMETRIC FILENAME : LLI110910A.IES

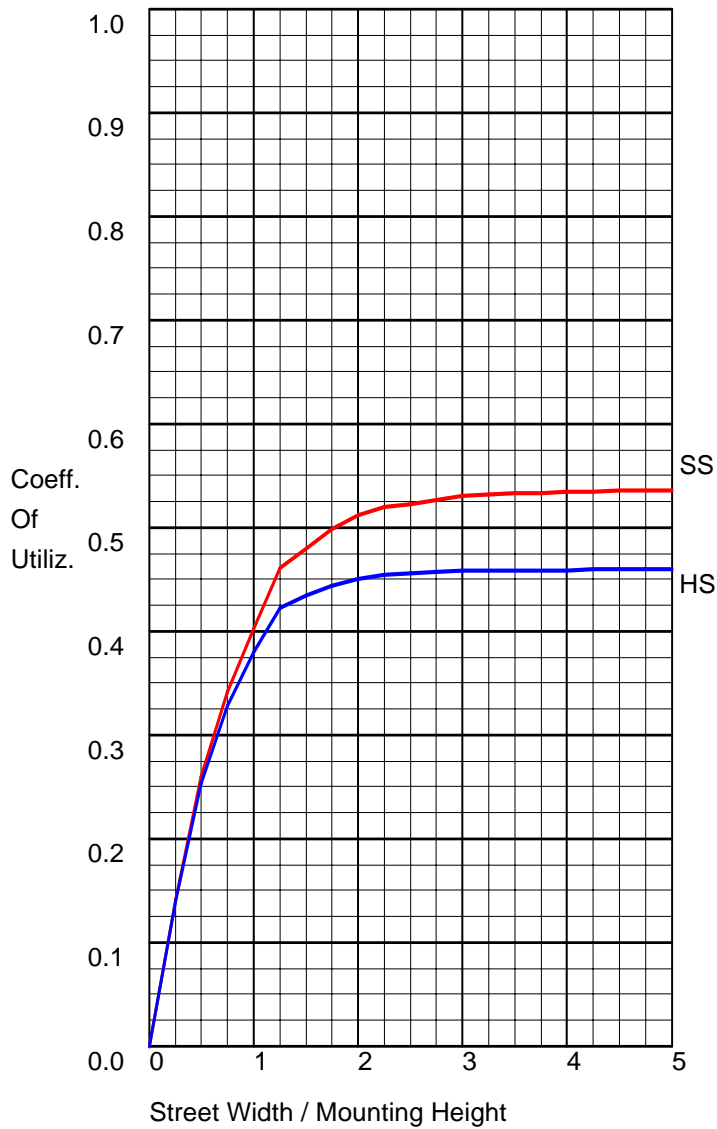
CANDELA TABULATION - (Cont.)

90.0	15	15	15	15	15	15	15	15	15	15
95.0	0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles
 Angles

	<u>180</u>
0.0	1743
5.0	1764
15.0	1618
25.0	1415
35.0	1297
45.0	1143
55.0	743
60.0	506
62.5	405
65.0	312
67.5	227
70.0	149
72.5	89
75.0	50
77.5	29
80.0	21
82.5	18
85.0	15
87.5	15
90.0	15
95.0	0
105.0	0
115.0	0
125.0	0
135.0	0
145.0	0
155.0	0
165.0	0
175.0	0
180.0	0

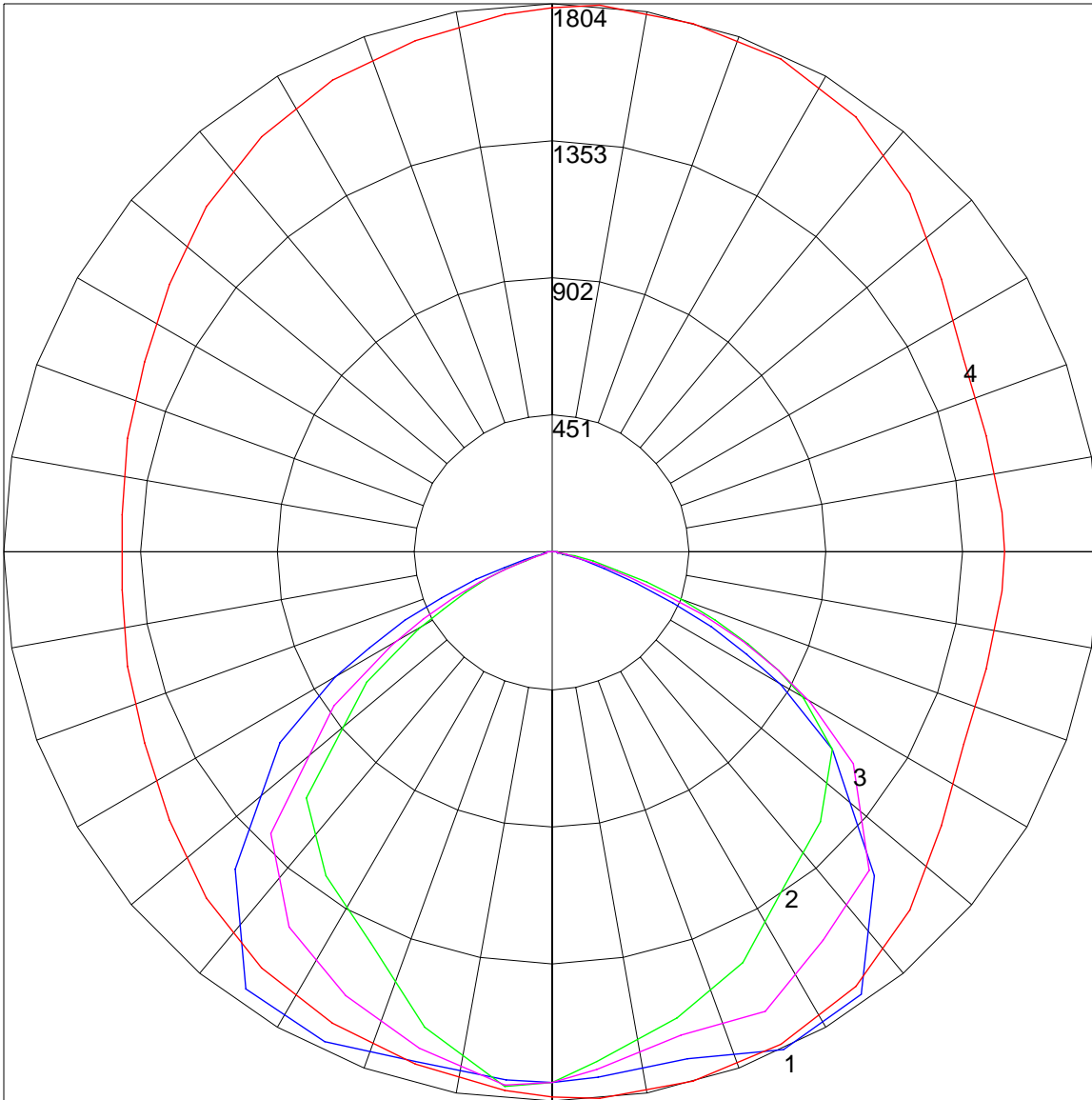
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

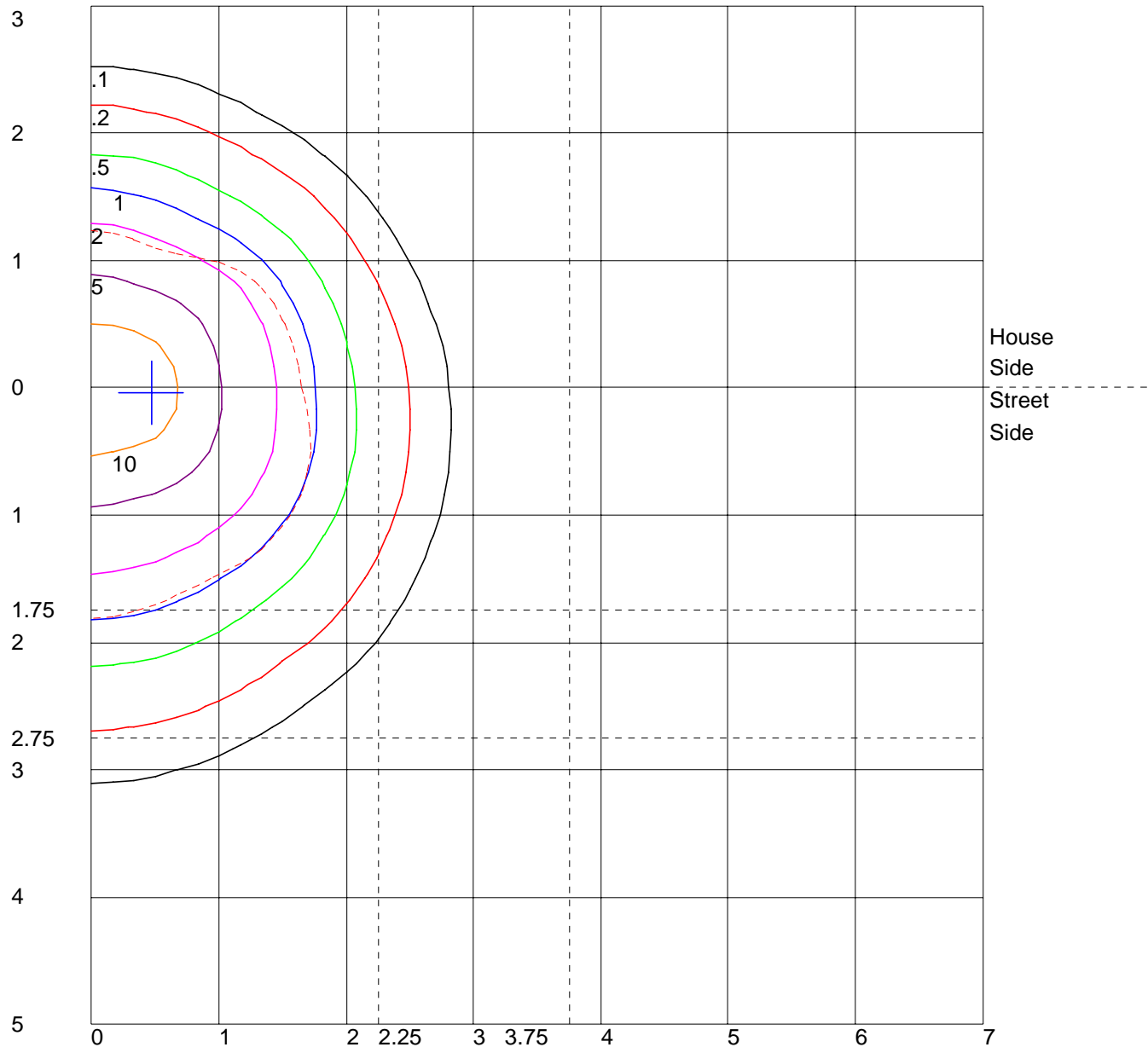
	Lumens	Percent Of Lamp
Downward Street Side	2677.3	N.A.
Downward House Side	2293.3	N.A.
Downward Total	4970.6	N.A.
Upward Street Side	2.2	N.A.
Upward House Side	2.1	N.A.
Upward Total	4.3	N.A.
Total Flux	4974.9	N.A.

POLAR GRAPH



Maximum Candela = 1804 Located At Horizontal Angle = 85, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (85 - 265) (Through Max. Cd.) : BLUE
2 - Vertical Plane Through Horizontal Angles (0 - 180) : GREEN
3 - Vertical Plane Through Horizontal Angles (45 - 225) : MAGENTA
4 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.) : RED

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



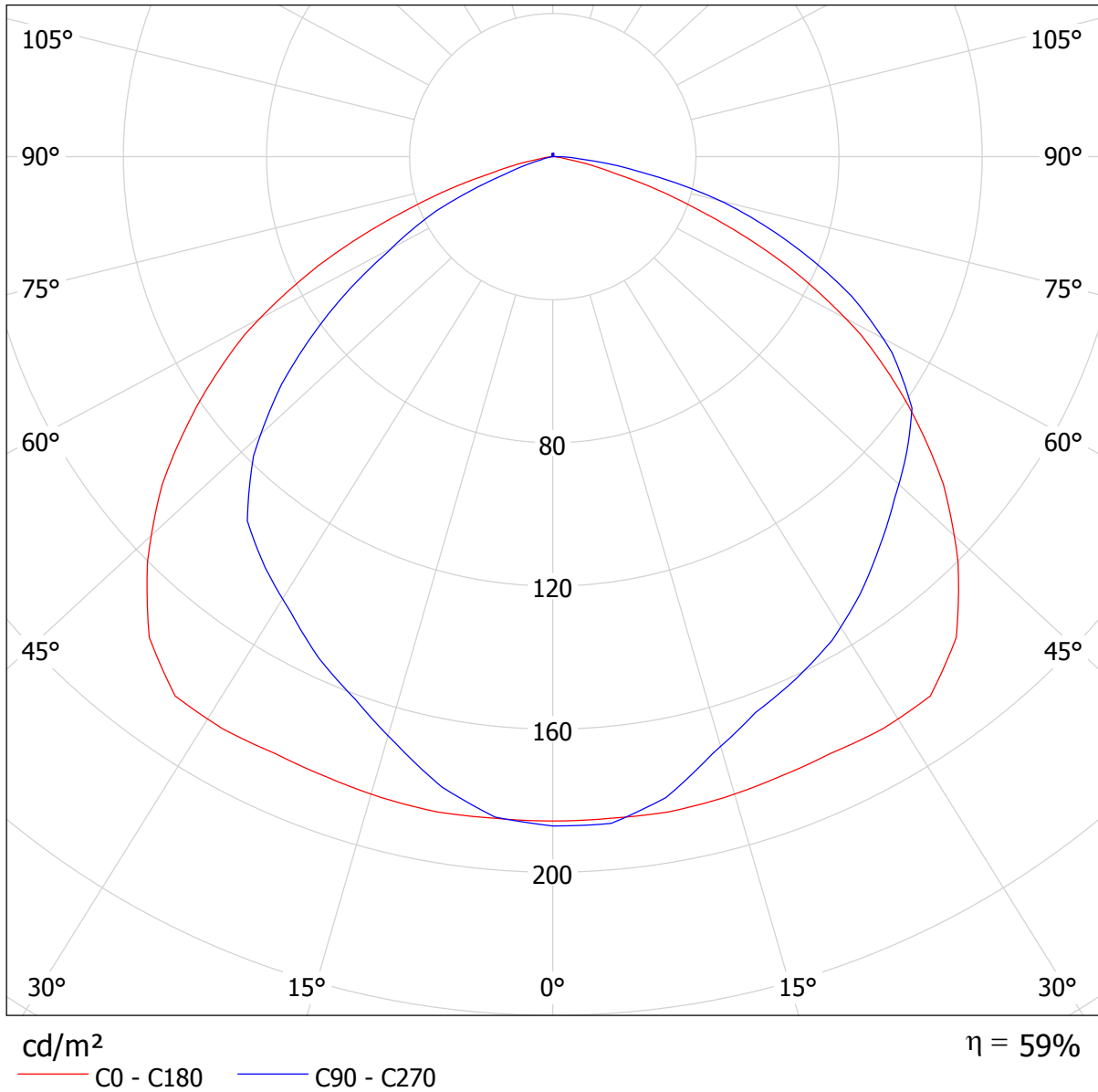
Distance In Units Of Mounting Height
 Values Based On 10 Foot Mounting Height
 1/2 Maximum Candela Trace Shown As Dashed Curve
 (+) = Maximum Candela Point

MHT LIGHTING INC
2285 MICHAEL FARADAY DR, SUITE 15,
SAN DIEGO CA, USA.

Operator MHT LIGHTING INC
Telephone 619-661-0600
Fax 619-661-0607
e-Mail SANDIEGO@MHTLIGHTING.COM

MHT LIGHTING INC MHTCH-100E / LDC (Polar)

Luminaire: MHT LIGHTING INC MHTCH-100E
Lamps: 1 x WJY100H.RZ.W6

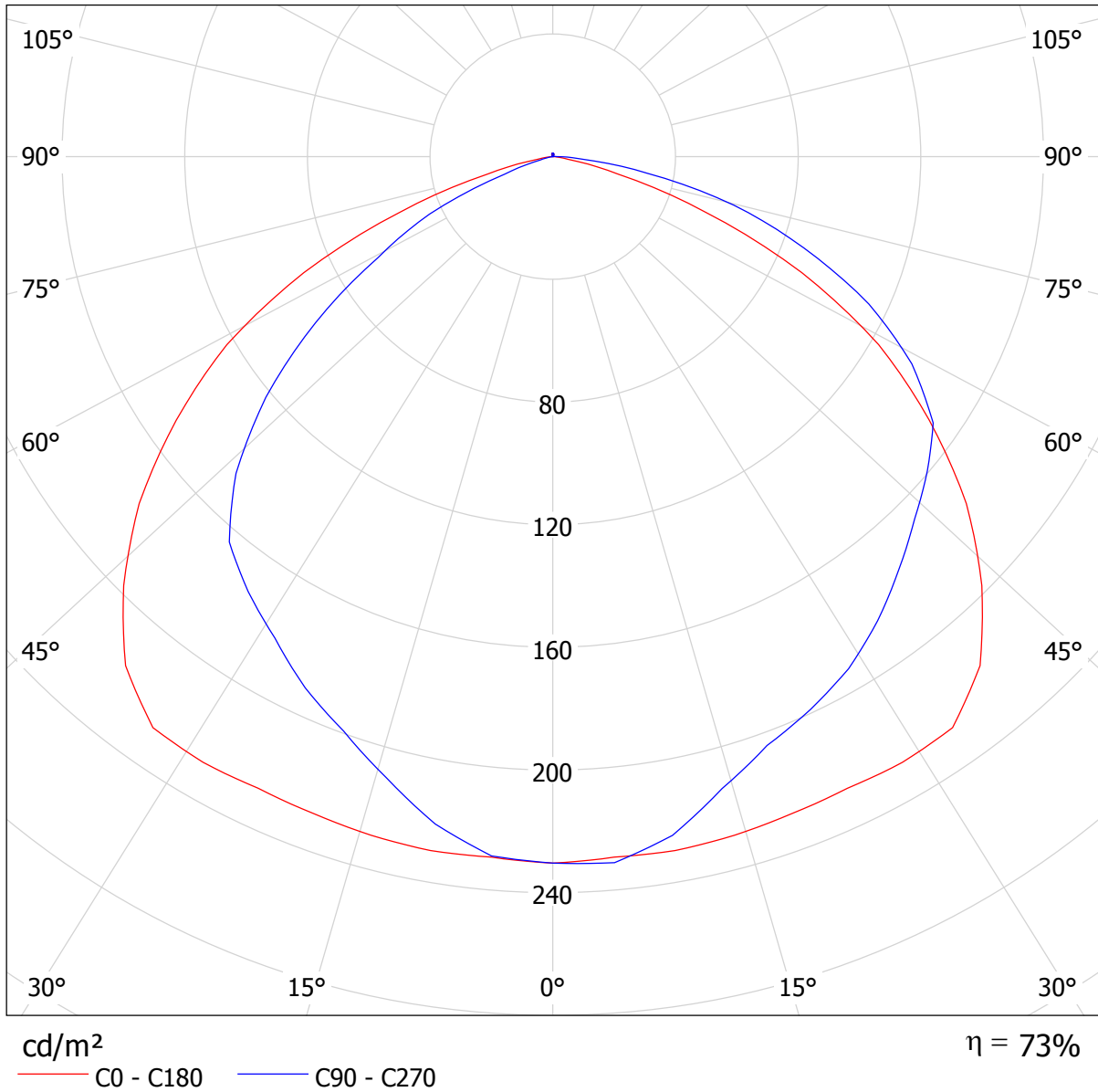


MHT LIGHTING INC
2285 MICHAEL FARADAY DR, SUITE 15,
SAN DIEGO CA, USA.

Operator MHT LIGHTING INC
Telephone 619-661-0600
Fax 619-661-0607
e-Mail SANDIEGO@MHTLIGHTING.COM

MHLIGHTING INC. MHTCH-85E / LDC (Polar)

Luminaire: MHLIGHTING INC. MHTCH-85E
Lamps: 1 x WJY85H.RZ.W6

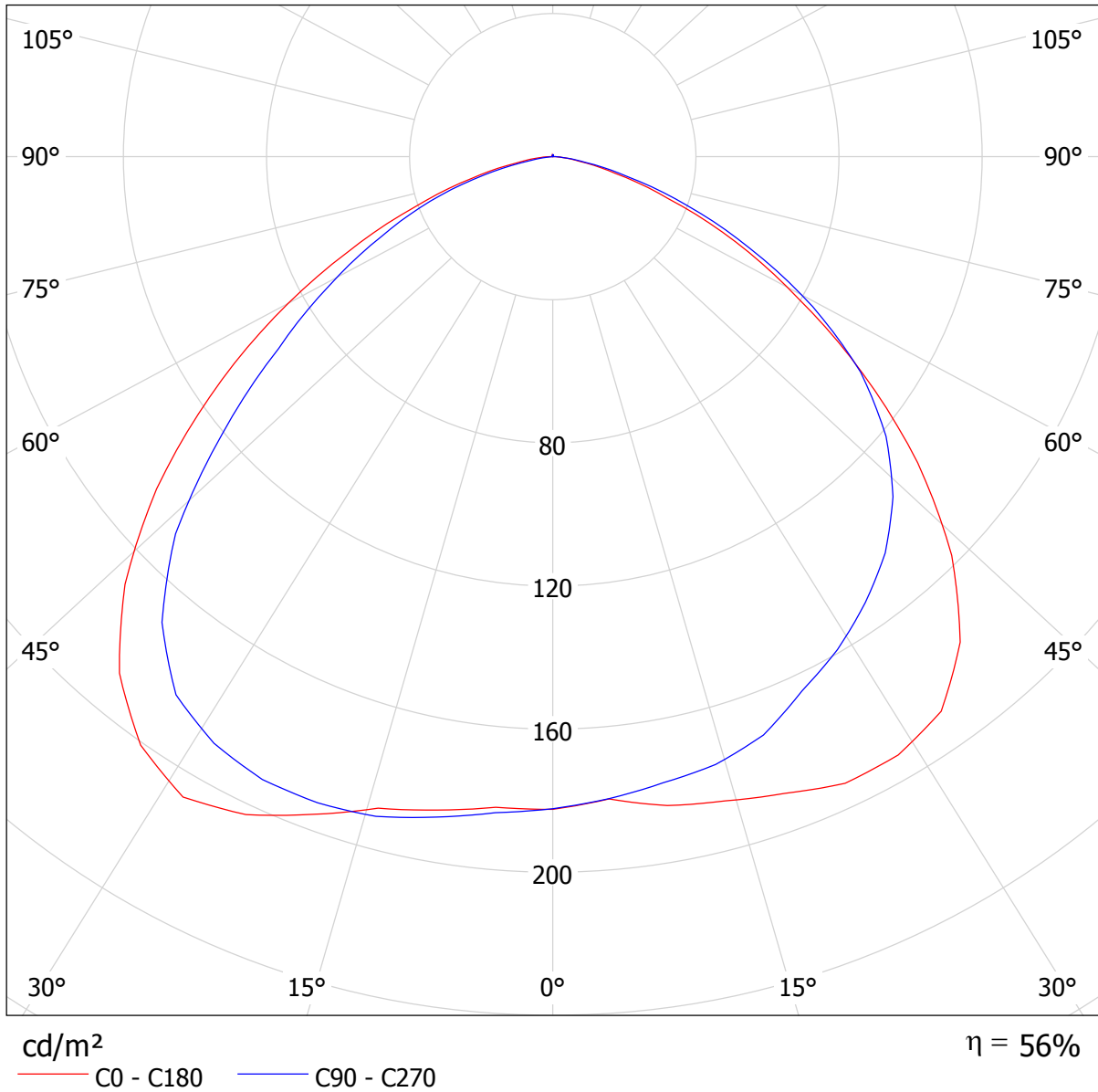


MHT LIGHTING INC
2285 MICHAEL FARADAY DR, SUITE 15,
SAN DIEGO CA, USA.

Operator MHT LIGHTING INC
Telephone 619-661-0600
Fax 619-661-0607
e-Mail SANDIEGO@MHTLIGHTING.COM

MHT LIGHTING INC MHTCH-80E / LDC (Polar)

Luminaire: MHT LIGHTING INC MHTCH-80E
Lamps: 1 x WJY80H.RZ.W1

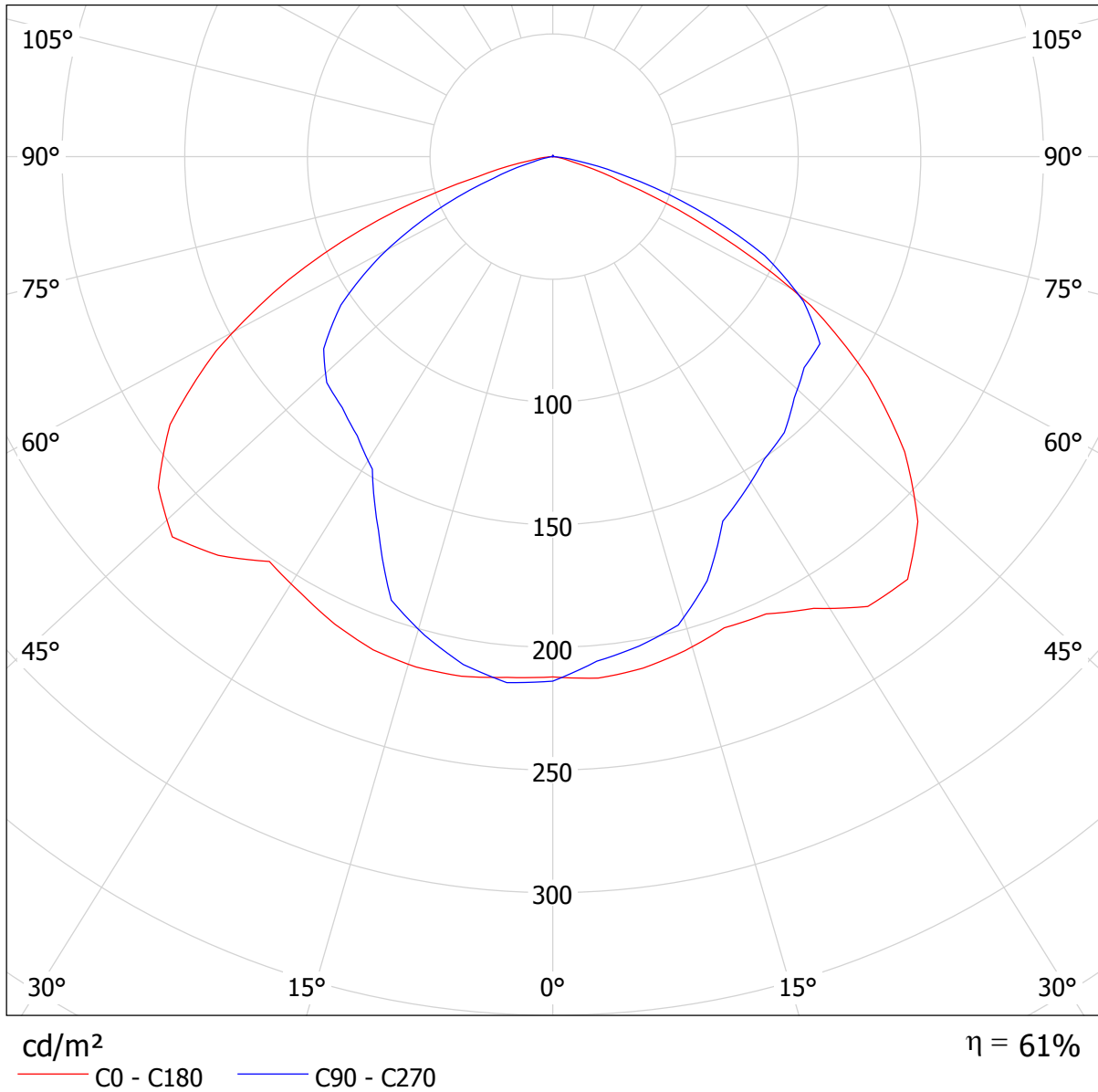


MHT LIGHTING INC
2285 MICHAEL FARADAY DR, SUITE 15,
SAN DIEGO CA, USA.

Operator MHT LIGHTING INC
Telephone 619-661-0600
Fax 619-661-0607
e-Mail SANDIEGO@MHTLIGHTING.COM

MHT LIGHTING INC MHTCH-70E / LDC (Polar)

Luminaire: MHT LIGHTING INC MHTCH-70E
Lamps: 1 x RT70W

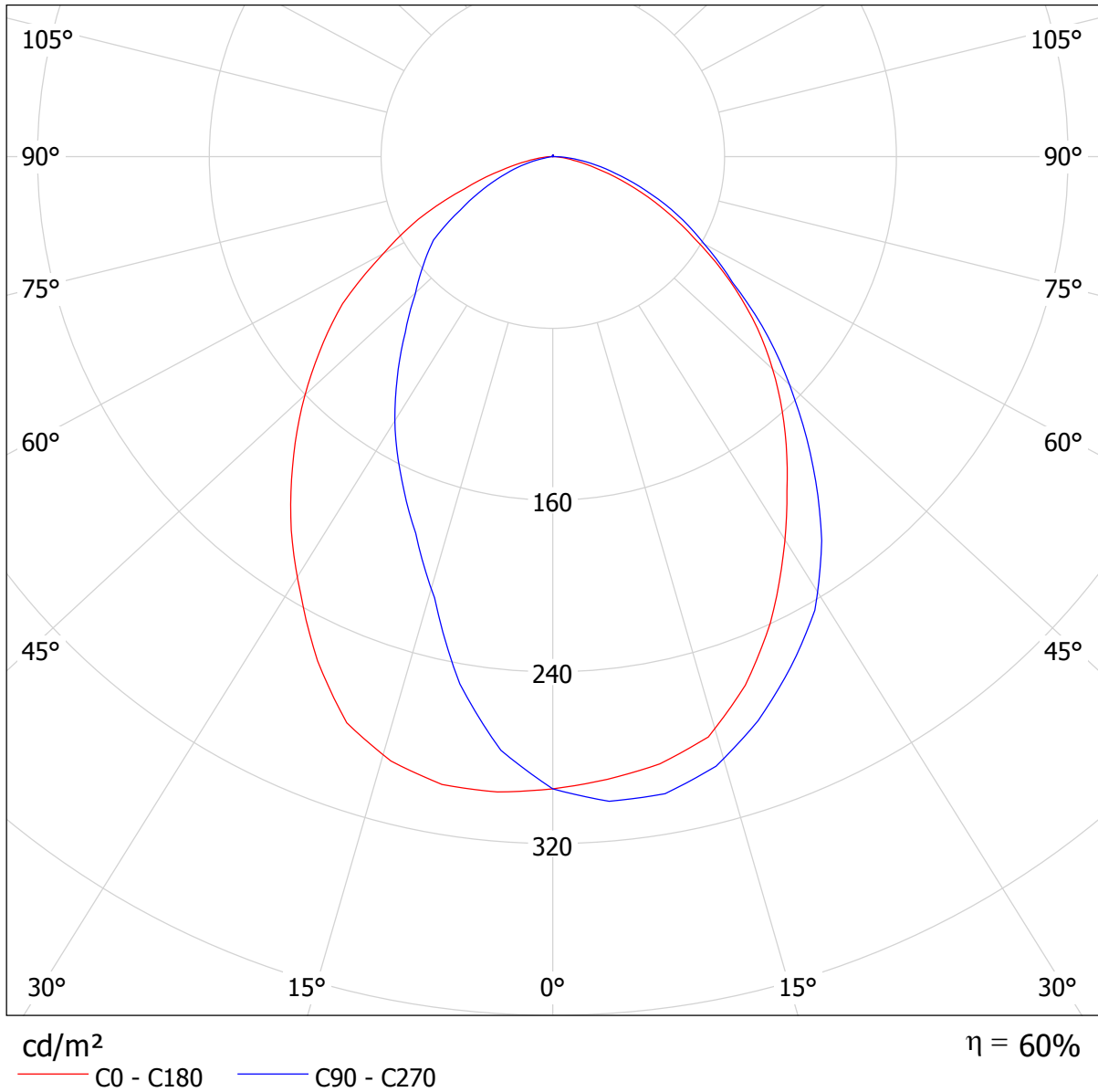


MHT LIGHTING INC
2285 MICHAEL FARADAY DR, SUITE 15,
SAN DIEGO CA, USA.

Operator MHT LIGHTING INC
Telephone 619-661-0600
Fax 619-661-0607
e-Mail SANDIEGO@MHTLIGHTING.COM

MHT LIGHTING INC MHTCH-55E / LDC (Polar)

Luminaire: MHT LIGHTING INC MHTCH-55E
Lamps: 1 x VL55W



MHT LIGHTING INC
2285 MICHAEL FARADAY DR, SUITE 15,
SAN DIEGO CA, USA.

Operator MHT LIGHTING INC
Telephone 619-661-0600
Fax 619-661-0607
e-Mail SANDIEGO@MHTLIGHTING.COM

MHT LIGHTING INC MHTCH-40E / LDC (Polar)

Luminaire: MHT LIGHTING INC MHTCH-40E
Lamps: 1 x RT40W

