

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P226446

Luminaire Tested: **IST-AF-1200-LED-E1-T3-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-1200-LED-E1-T3-8030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 3000K CCT, 80 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7372.7 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U5 - G1

Input Watts (W): 82.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

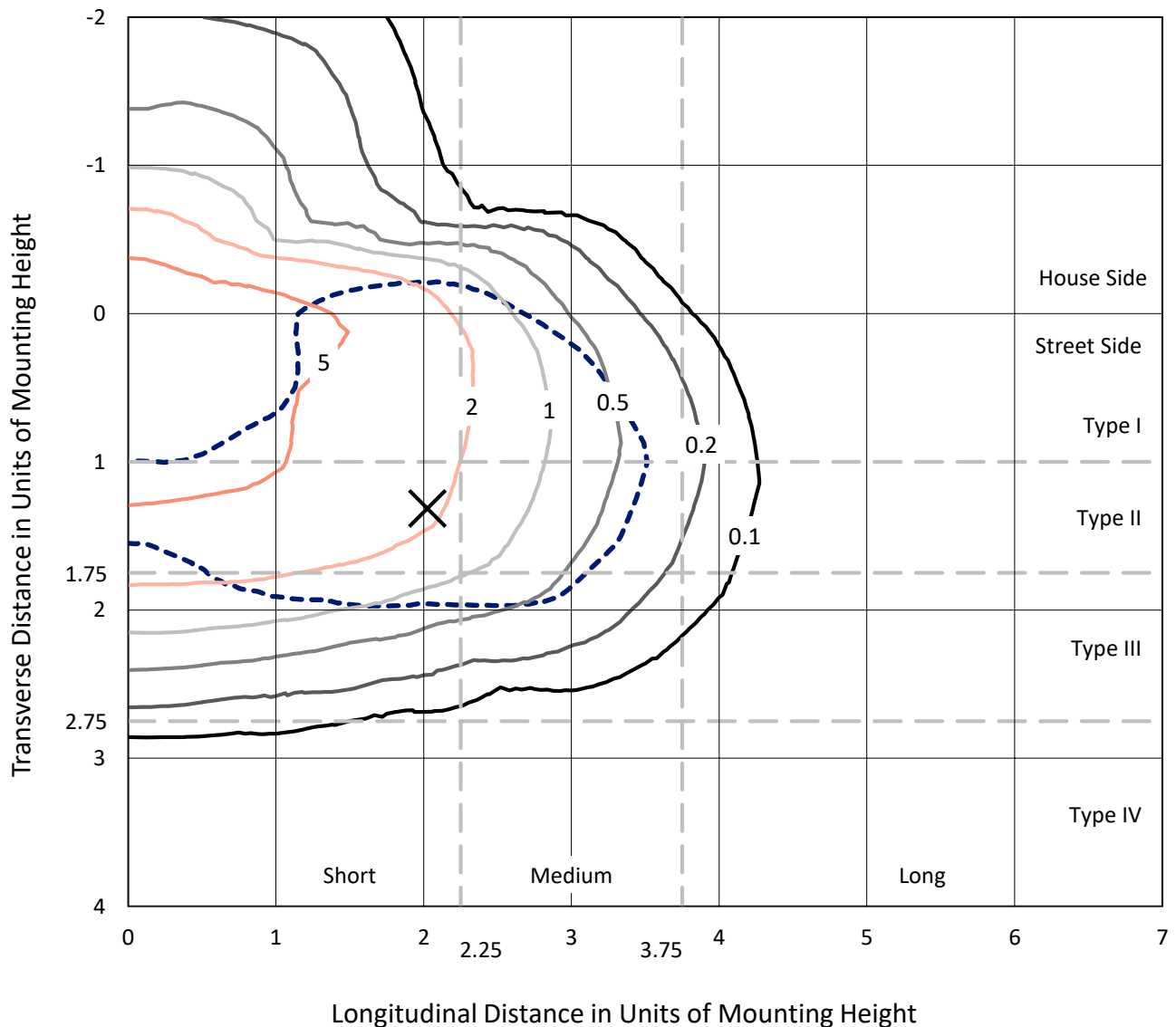


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

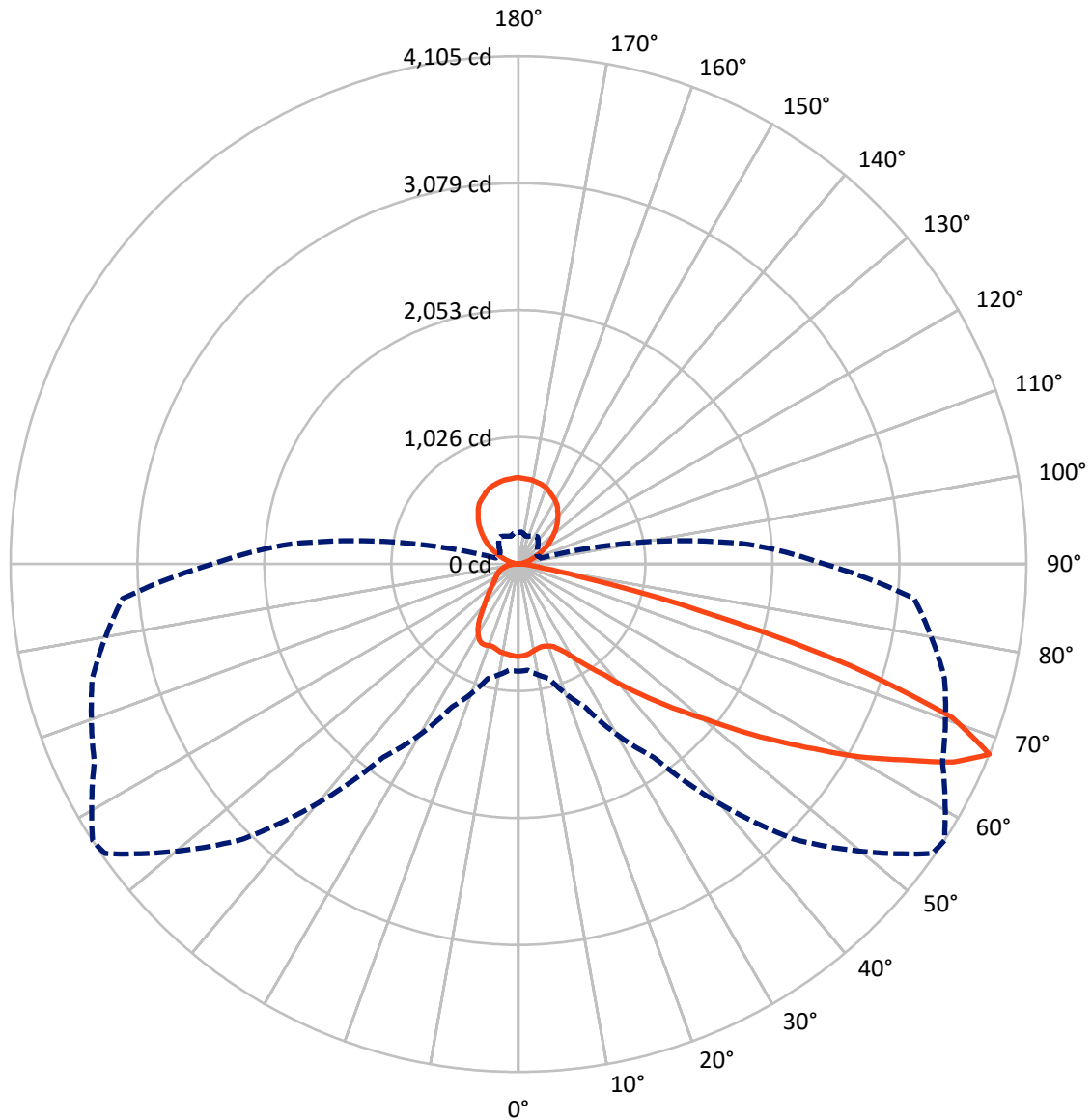


Based on 10 foot mounting height. Maximum calculated value = 7.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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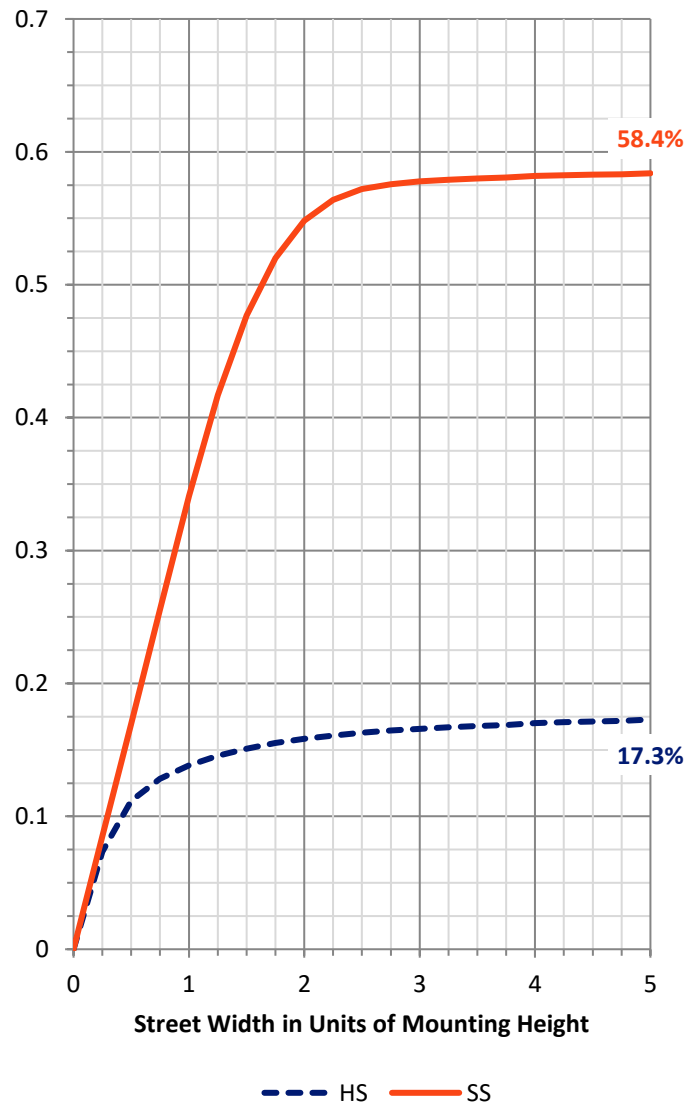
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1312.2	869.2	2181.4
	% Fixture	17.8	11.8	29.6
Street Side	Lumens	4323.3	868.0	5191.3
	% Fixture	58.6	11.8	70.4
Total	Lumens	5635.5	1737.2	7372.7
	% Fixture	76.4	23.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	0.9
10°-20°	200.8	2.7
20°-30°	345.6	4.7
30°-40°	561.8	7.6
40°-50°	906.2	12.3
50°-60°	1351.1	18.3
60°-70°	1521.6	20.6
70°-80°	586.6	8.0
80°-90°	91.9	1.2
90°-100°	11.4	0.2
100°-110°	57.4	0.8
110°-120°	166.1	2.3
120°-130°	273.2	3.7
130°-140°	336.8	4.6
140°-150°	344.6	4.7
150°-160°	290.3	3.9
160°-170°	191.2	2.6
170°-180°	66.3	0.9
0°-90°	5635.5	76.4
0°-180°	7372.7	100.0



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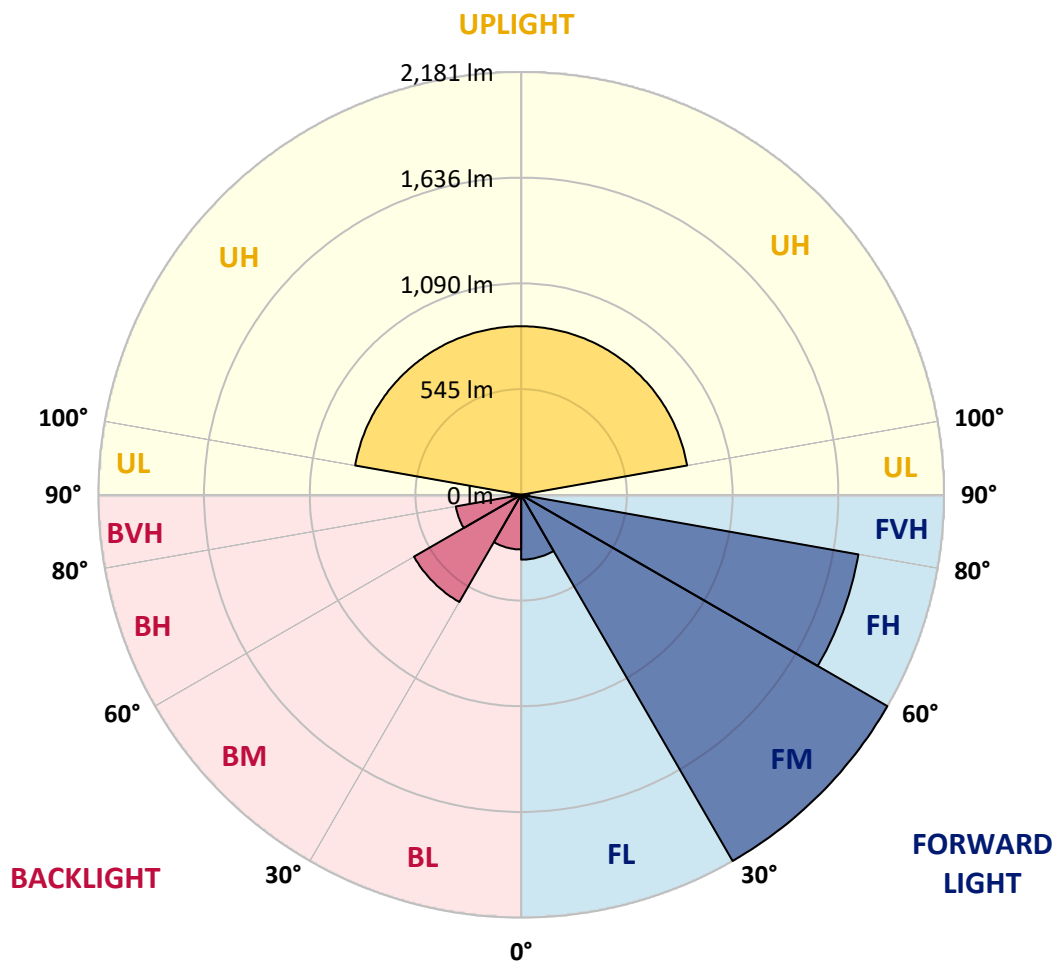
CATALOG NUMBER: IST-AF-1200-LED-E1-T3-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	334.4	4.5			
FM (30°-60°)	2180.7	29.6			
FH (60°-80°)	1766.0	24.0			G1/1800
FVH (80°-90°)	42.2	0.6			G1/100
BL (0°-30°)	281.8	3.8	B1/500		
BM (30°-60°)	638.4	8.7	B1/1000		
BH (60°-80°)	342.3	4.6	B1/500		G1/500
BVH (80°-90°)	49.7	0.7			G1/100
UL (90°-100°)	11.4	0.2		U2/50	
UH (100°-180°)	869.2	11.8		U4/1000	

BUG Rating: B1-U5-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0
2.5°	741.2	742.9	744.5	743.7	743.7	743.7	743.7	742.1	744.5	744.5	742.9
5°	729.0	729.8	730.6	732.3	733.9	735.5	736.3	736.3	737.2	736.3	734.7
7.5°	711.0	711.9	715.1	715.1	716.7	720.0	721.6	723.3	725.7	725.7	724.9
10°	705.3	705.3	705.3	702.9	704.5	705.3	707.8	707.8	714.3	717.6	719.2
12.5°	711.9	711.0	711.0	704.5	698.8	696.3	698.8	699.6	707.0	711.9	715.1
15°	726.5	726.5	724.9	715.1	703.7	694.7	693.9	693.9	699.6	707.0	712.7
17.5°	760.8	764.1	752.7	737.2	718.4	703.7	698.0	697.2	701.2	707.0	712.7
20°	826.1	825.3	808.2	780.4	747.8	723.3	709.4	707.8	707.0	710.2	716.7
22.5°	903.7	900.4	880.0	844.9	800.0	755.1	728.2	724.9	718.4	720.8	729.8
25°	987.0	987.8	962.5	916.8	860.4	806.5	765.7	762.5	748.6	747.0	756.7
27.5°	1070.2	1080.8	1046.6	1003.3	936.3	871.9	812.3	807.4	795.1	791.0	800.8
30°	1191.9	1187.8	1145.3	1089.0	1022.1	941.2	884.1	875.1	850.6	856.3	867.0
32.5°	1294.7	1303.7	1265.3	1198.4	1110.2	1025.3	959.2	954.3	930.6	937.2	951.9
35°	1420.4	1441.7	1391.0	1308.6	1223.7	1136.3	1057.2	1044.1	1025.3	1038.4	1049.8
37.5°	1564.1	1574.7	1535.5	1429.4	1342.9	1251.5	1161.7	1141.2	1120.8	1147.8	1168.2
40°	1701.3	1718.4	1667.8	1578.0	1477.6	1390.2	1292.3	1288.2	1240.8	1270.2	1323.3
42.5°	1904.5	1925.8	1844.9	1740.4	1649.8	1544.5	1451.5	1429.4	1378.0	1419.6	1508.6
45°	2046.6	2045.8	1991.1	1904.5	1849.0	1747.0	1621.3	1595.1	1539.6	1595.1	1714.3
47.5°	2098.0	2110.2	2091.5	2080.9	2061.3	1987.0	1801.7	1777.2	1724.9	1807.4	1917.6
50°	2173.9	2170.7	2170.7	2236.0	2292.3	2276.8	2013.1	1978.0	1923.3	2022.1	2180.5
52.5°	2193.5	2164.1	2209.8	2334.7	2513.5	2526.6	2258.8	2239.2	2173.9	2270.2	2465.4
55°	2138.8	2131.5	2204.1	2385.4	2667.0	2760.1	2543.7	2516.8	2443.3	2525.8	2773.1
57.5°	2016.4	2035.1	2151.9	2374.7	2773.1	2965.8	2856.4	2818.0	2712.7	2762.5	3078.4
60°	1888.2	1897.2	2051.5	2337.2	2801.7	3108.6	3184.6	3162.5	2982.1	3011.5	3304.6
62.5°	1746.2	1724.9	1884.9	2306.2	2769.9	3305.4	3502.9	3485.8	3272.7	3263.7	3465.4
65°	1349.4	1378.8	1515.1	1906.2	2551.9	3458.8	3882.5	3860.5	3596.8	3471.9	3448.2
67.5°	867.0	861.2	957.6	1274.3	1907.0	3143.7	4080.9	4105.4	3782.1	3565.8	3211.5
70°	311.0	320.0	355.9	578.8	1045.7	2094.7	3597.6	3719.3	3645.8	3390.3	2613.9
72.5°	189.4	189.4	215.5	260.4	423.7	993.5	2564.1	2805.0	2975.6	2793.5	1930.7
75°	148.6	147.8	156.7	179.6	228.6	325.7	1363.3	1549.4	1908.6	1929.8	1098.8
77.5°	117.6	116.7	125.7	136.3	170.6	172.2	435.1	566.5	875.9	824.5	392.7
80°	94.7	93.9	100.4	103.7	124.9	119.2	174.7	202.5	306.9	269.4	169.8
82.5°	85.7	85.7	92.2	79.2	86.5	84.1	108.6	115.9	154.3	160.0	102.0
85°	55.5	57.1	86.5	76.7	56.3	51.4	69.4	73.5	96.3	105.3	49.8
87.5°	26.1	28.6	66.1	63.7	37.6	27.8	39.2	41.6	52.2	64.5	29.4
90°	9.9	9.9	15.2	17.0	12.9	11.9	13.5	13.1	14.7	17.2	15.2
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.2	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.6	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	28.4	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	49.4	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.6	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.8	94.0	90.0	87.0
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.2	121.0	119.0	116.0



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CATALOG NUMBER: IST-AF-1200-LED-E1-T3-8030-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	148.4	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	179.6	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	211.8	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	246.8	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	279.8	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	313.4	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.2	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	377.8	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	412.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	444.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	473.4	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	500.4	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	528.2	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	557.2	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	581.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	597.6	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	611.6	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	627.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	644.8	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	659.2	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	667.8	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	673.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	679.2	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	686.6	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	689.6	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	691.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	695.0	699.0	701.0	698.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0	747.0
2.5°	745.3	743.7	744.5	745.3	746.1	748.6	749.4	749.4	749.4	748.6	750.2
5°	736.3	734.7	734.7	737.2	739.6	742.9	747.8	751.9	753.5	754.3	754.3
7.5°	726.5	724.9	725.7	729.8	733.9	736.3	741.2	743.7	750.2	750.2	751.9
10°	720.0	721.6	722.5	726.5	729.8	729.8	729.0	727.4	725.7	729.8	728.2
12.5°	715.9	718.4	717.6	722.5	724.1	717.6	707.8	694.7	693.1	694.7	696.3
15°	714.3	714.3	716.7	716.7	708.6	695.5	683.3	684.1	685.7	690.6	690.6
17.5°	714.3	715.1	716.7	711.0	696.3	684.9	682.5	680.0	671.0	668.6	666.1
20°	720.0	718.4	720.0	709.4	696.3	687.4	668.6	650.6	633.5	626.1	622.9
22.5°	733.9	731.4	730.6	720.0	703.7	673.5	636.7	609.0	579.6	569.8	566.5
25°	758.4	757.6	751.9	744.5	698.8	640.0	593.5	549.4	517.6	500.4	501.2
27.5°	801.6	801.6	798.4	765.7	673.5	598.4	535.5	490.6	458.0	441.6	439.2
30°	867.0	868.6	870.2	771.4	633.5	537.2	471.8	441.6	422.0	409.8	409.0
32.5°	947.8	956.8	946.1	764.9	578.8	462.9	422.0	411.4	401.6	393.5	392.7
35°	1054.7	1079.2	1012.3	738.8	517.6	412.3	391.8	384.5	377.2	371.4	372.3
37.5°	1198.4	1222.1	1054.7	694.7	439.2	383.7	374.7	363.3	351.8	339.6	338.0
40°	1368.2	1360.8	1069.4	611.4	390.2	369.8	357.6	342.9	323.3	305.3	302.0
42.5°	1538.0	1489.0	1057.2	508.6	358.4	357.6	340.4	321.6	302.0	286.5	286.5
45°	1728.2	1601.7	1019.6	412.3	333.1	344.5	323.3	303.7	285.7	274.3	273.5
47.5°	1907.8	1707.0	957.6	343.7	307.8	327.4	310.2	292.3	275.1	265.3	262.9
50°	2118.4	1827.0	910.2	297.1	283.3	310.2	302.9	286.5	270.2	258.8	257.1
52.5°	2331.5	1943.7	874.3	265.3	261.2	297.1	299.6	289.8	272.7	250.6	249.0
55°	2554.3	2089.8	802.5	240.0	241.6	287.4	303.7	296.3	284.1	248.2	246.5
57.5°	2741.3	2224.5	676.7	222.9	226.1	280.0	305.3	291.4	277.6	249.8	247.4
60°	2887.4	2316.8	496.3	209.0	212.2	271.8	298.0	274.3	256.3	249.8	245.7
62.5°	2932.3	2320.0	329.8	192.7	201.6	258.0	284.9	265.3	244.1	247.4	245.7
65°	2819.6	2197.6	235.9	177.1	192.7	241.6	279.2	256.3	238.4	251.4	249.8
67.5°	2472.7	1851.5	189.4	164.9	180.4	224.5	268.6	248.2	233.5	260.4	255.5
70°	1926.6	1328.2	160.8	152.7	167.4	208.2	253.9	239.2	226.9	253.1	246.5
72.5°	1270.2	782.1	142.0	141.2	151.8	194.3	237.6	231.0	216.3	229.4	219.6
75°	662.9	362.5	123.3	128.2	134.7	182.0	222.9	216.3	200.0	204.9	201.6
77.5°	260.4	169.8	106.9	112.7	120.0	164.1	204.1	197.6	183.7	179.6	178.8
80°	142.9	114.3	89.0	96.3	101.2	147.8	184.5	177.1	162.5	160.0	157.6
82.5°	90.6	74.3	73.5	78.4	84.9	131.4	165.7	154.3	142.0	167.4	135.5
85°	42.4	44.1	52.2	58.8	66.1	111.8	144.5	132.2	120.0	116.7	103.7
87.5°	23.7	29.4	34.3	40.0	45.7	78.4	114.3	102.9	89.8	76.7	79.2
90°	12.7	12.7	18.8	18.0	16.8	18.4	64.3	58.6	51.9	26.2	18.9
92.5°	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	5.0	4.0	4.0
95°	7.0	7.0	7.0	8.0	7.0	7.0	7.0	7.0	6.0	5.0	5.0
97.5°	8.0	8.0	9.0	10.0	12.0	9.0	9.0	8.0	8.0	7.0	7.0
100°	19.0	19.0	23.0	26.0	29.0	21.0	12.0	10.0	9.0	8.0	8.0
102.5°	38.0	39.0	42.0	47.0	50.0	40.0	27.0	18.0	13.0	11.0	11.0
105°	61.0	61.0	65.0	70.0	72.0	63.0	48.0	36.0	27.0	22.0	21.0
107.5°	86.0	87.0	90.0	94.0	95.0	88.0	73.0	58.0	49.0	42.0	41.0
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	147.0	147.0	149.0	150.0	148.0	143.0	134.0	121.0	106.0	99.0	99.0
115°	178.0	177.0	179.0	182.0	179.0	174.0	168.0	159.0	147.0	139.0	140.0
117.5°	209.0	208.0	210.0	215.0	211.0	205.0	202.0	197.0	189.0	184.0	184.0
120°	243.0	243.0	245.0	250.0	246.0	243.0	237.0	233.0	226.0	223.0	225.0
122.5°	277.0	276.0	278.0	283.0	279.0	277.0	271.0	267.0	261.0	260.0	263.0
125°	310.0	310.0	310.0	315.0	313.0	310.0	305.0	299.0	296.0	294.0	298.0
127.5°	347.0	345.0	346.0	346.0	345.0	340.0	339.0	333.0	329.0	329.0	330.0
130°	380.0	379.0	381.0	381.0	377.0	372.0	370.0	366.0	362.0	361.0	363.0
132.5°	415.0	414.0	414.0	416.0	411.0	405.0	404.0	401.0	393.0	394.0	396.0
135°	451.0	450.0	447.0	448.0	443.0	437.0	435.0	432.0	426.0	426.0	429.0
137.5°	482.0	481.0	476.0	475.0	473.0	468.0	464.0	460.0	459.0	457.0	460.0
140°	511.0	509.0	504.0	502.0	500.0	497.0	491.0	489.0	487.0	485.0	488.0
142.5°	536.0	534.0	533.0	533.0	527.0	525.0	521.0	518.0	517.0	515.0	518.0
145°	560.0	558.0	561.0	562.0	556.0	551.0	550.0	547.0	544.0	546.0	550.0
147.5°	585.0	583.0	586.0	585.0	580.0	575.0	574.0	574.0	571.0	572.0	575.0
150°	610.0	606.0	603.0	600.0	597.0	593.0	593.0	593.0	593.0	592.0	595.0
152.5°	628.0	623.0	618.0	614.0	611.0	610.0	610.0	609.0	608.0	608.0	611.0
155°	641.0	638.0	636.0	631.0	626.0	628.0	630.0	627.0	625.0	625.0	629.0
157.5°	655.0	650.0	650.0	648.0	644.0	645.0	646.0	644.0	643.0	643.0	646.0
160°	666.0	660.0	661.0	664.0	658.0	655.0	655.0	656.0	659.0	660.0	663.0
162.5°	674.0	668.0	670.0	671.0	667.0	663.0	661.0	665.0	669.0	669.0	673.0
165°	682.0	678.0	680.0	677.0	672.0	673.0	673.0	676.0	676.0	678.0	681.0
167.5°	694.0	688.0	688.0	684.0	678.0	685.0	688.0	686.0	684.0	687.0	690.0
170°	701.0	696.0	694.0	689.0	686.0	691.0	693.0	692.0	692.0	695.0	698.0
172.5°	701.0	696.0	694.0	692.0	689.0	690.0	690.0	693.0	695.0	697.0	699.0
175°	699.0	694.0	696.0	695.0	690.0	690.0	691.0	695.0	697.0	698.0	700.0
177.5°	702.0	698.0	701.0	699.0	694.0	695.0	697.0	699.0	700.0	705.0	707.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0

(END OF REPORT)