

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: P226749

Luminaire Tested: **IST-AF-1200-LED-E1-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)
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-T4W
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7053.2 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Semi-Cutoff
BUG Rating: B1 - U1 - G2

Input Watts (W): 66
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

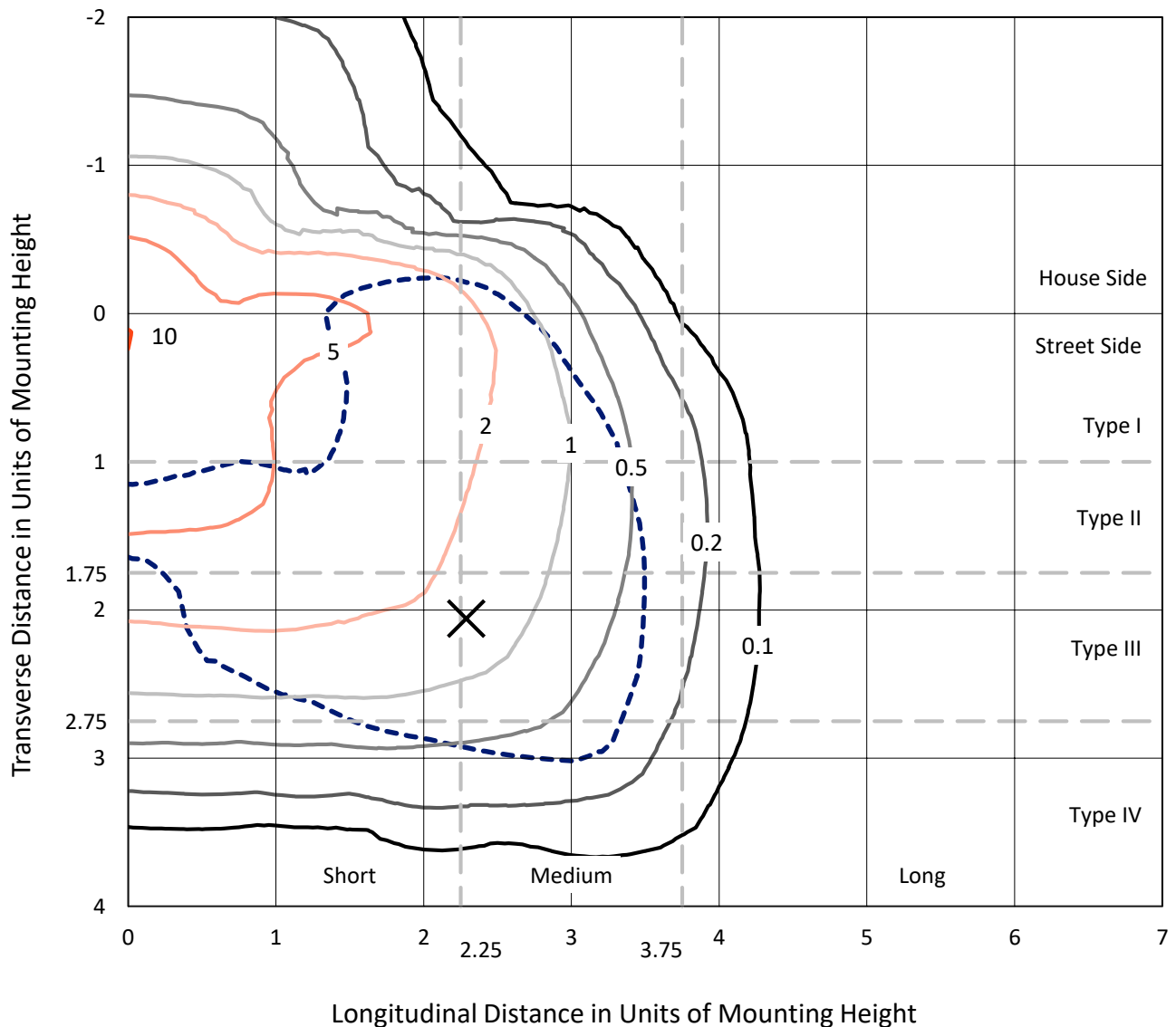


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

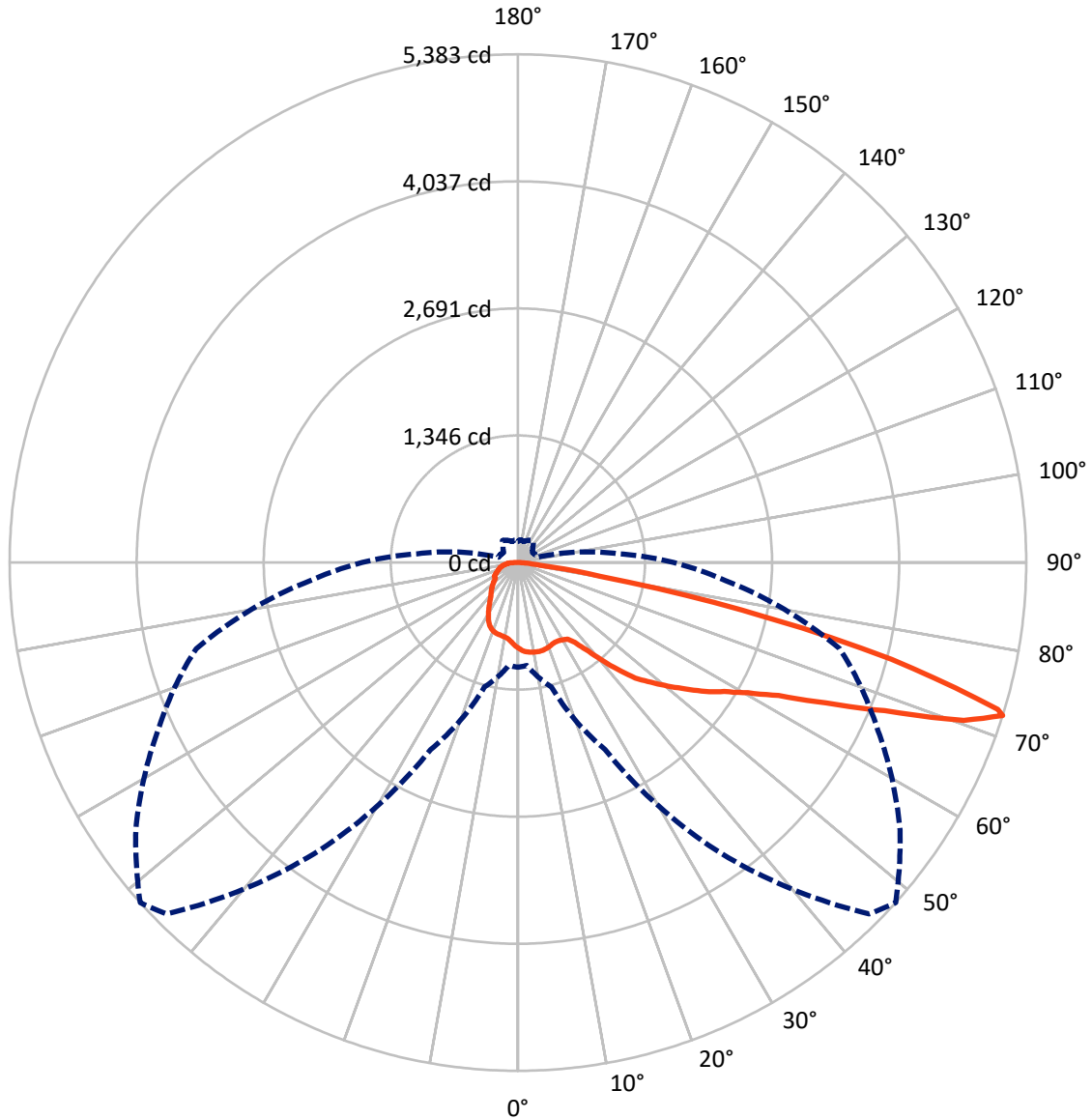


Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type IV - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1531.9	3.2	1535.1
	% Fixture	21.7	0.0	21.8
Street Side	Lumens	5517.0	1.1	5518.1
	% Fixture	78.2	0.0	78.2
Total	Lumens	7048.9	4.3	7053.2
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	1.2
10°-20°	250.6	3.6
20°-30°	386.5	5.5
30°-40°	579.2	8.2
40°-50°	964.6	13.7
50°-60°	1507.4	21.4
60°-70°	1991.1	28.2
70°-80°	1151.8	16.3
80°-90°	132.0	1.9
90°-100°	4.3	0.1
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	7048.9	99.9
0°-180°	7053.2	100.0



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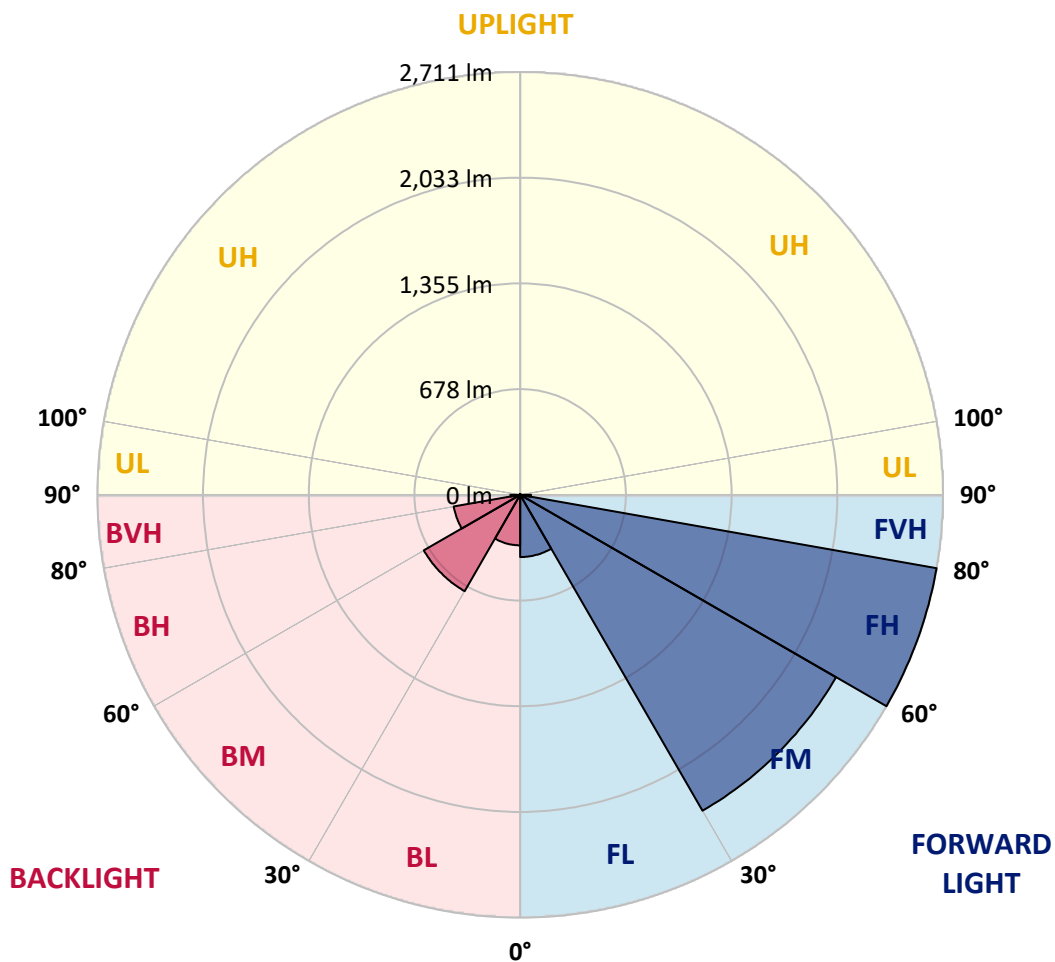
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	398.8	5.7			
FM	(30°-60°)	2338.3	33.2			
FH	(60°-80°)	2710.6	38.4			G2/5000
FVH	(80°-90°)	69.3	1.0			G1/100
BL	(0°-30°)	324.1	4.6	B1/500		
BM	(30°-60°)	712.8	10.1	B1/1000		
BH	(60°-80°)	432.2	6.1	B1/500		G1/500
BVH	(80°-90°)	62.8	0.9			G1/100
UL	(90°-100°)	4.3	0.1		U1/10	
UH	(100°-180°)	3.2	0.0		U1/10	

BUG Rating: B1-U1-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4
2.5°	955.4	954.4	954.4	946.2	943.2	938.0	934.0	927.8	921.7	914.5	905.3
5°	1001.5	1004.5	1000.4	988.2	972.8	956.5	950.3	936.0	916.6	899.2	882.8
7.5°	1045.5	1046.5	1035.2	1014.8	991.2	965.7	957.5	938.0	916.6	893.0	869.5
10°	1077.2	1078.2	1061.8	1033.2	1001.5	972.8	963.6	944.2	917.6	892.0	862.3
12.5°	1095.6	1096.6	1072.1	1042.4	1004.5	975.9	967.7	947.3	919.6	886.9	854.2
15°	1092.5	1095.6	1075.1	1042.4	1002.5	976.9	966.7	949.3	914.5	881.8	847.0
17.5°	1072.1	1076.1	1059.8	1024.0	992.3	971.8	960.6	943.2	909.4	874.6	836.8
20°	1032.2	1037.3	1030.1	995.3	973.8	957.5	950.3	934.0	902.2	866.4	827.6
22.5°	987.1	992.3	990.2	961.6	951.3	943.2	936.0	923.7	896.1	860.3	823.5
25°	954.4	958.5	955.4	930.9	934.0	934.0	929.9	920.7	895.1	862.3	823.5
27.5°	1008.6	1008.6	982.0	931.9	926.8	936.0	934.0	928.8	908.4	872.6	831.7
30°	1207.1	1191.7	1143.7	1017.8	953.4	949.3	948.3	945.2	926.8	895.1	857.2
32.5°	1429.1	1413.7	1356.4	1198.9	1064.9	976.9	967.7	968.7	963.6	934.0	896.1
35°	1626.5	1624.4	1579.4	1408.6	1237.8	1074.1	1037.3	1012.7	1010.7	998.4	968.7
37.5°	1786.1	1786.1	1790.2	1595.8	1425.0	1228.6	1166.2	1088.4	1088.4	1081.3	1062.8
40°	1968.2	1976.3	1985.5	1765.6	1625.5	1412.7	1342.1	1224.5	1188.7	1199.9	1204.0
42.5°	2207.5	2217.8	2211.6	1975.3	1808.6	1632.6	1545.7	1403.5	1315.5	1333.9	1376.9
45°	2369.2	2373.2	2417.2	2194.2	2038.7	1818.8	1745.2	1549.8	1462.8	1500.7	1576.4
47.5°	2552.3	2562.5	2569.7	2442.8	2308.8	2029.5	1894.5	1692.0	1635.7	1693.0	1812.7
50°	2731.3	2718.0	2737.4	2732.3	2564.5	2216.7	2056.1	1824.9	1829.0	1906.8	2103.2
52.5°	2886.8	2841.8	2886.8	2943.0	2893.9	2409.0	2221.8	1981.5	2040.8	2135.9	2445.9
55°	3006.5	2898.0	2973.7	3133.3	3122.0	2578.9	2411.1	2190.1	2289.4	2419.3	2862.2
57.5°	2762.0	2775.3	2983.9	3261.2	3256.1	2750.7	2576.8	2451.0	2572.7	2718.0	3355.3
60°	2533.8	2593.2	2915.4	3281.6	3349.1	2937.9	2799.8	2747.6	2860.2	3037.1	3827.9
62.5°	2413.1	2469.4	2803.9	3243.8	3497.5	3215.1	3099.5	3059.6	3213.1	3411.5	4249.3
65°	2451.0	2485.8	2796.7	3301.1	3668.3	3634.5	3584.4	3517.9	3594.6	3780.8	4439.7
67.5°	2344.6	2401.9	2737.4	3402.3	3980.3	4146.0	4188.0	4116.4	4051.9	4026.3	4162.4
70°	1745.2	1800.4	2152.3	2983.9	4236.0	5034.0	5008.5	4769.1	4335.4	3973.1	3252.0
72°	1108.9	1093.5	1362.6	2186.0	3765.5	5262.2	5382.9	4939.9	4206.4	3528.2	2208.6
72.5°	806.1	878.7	1130.4	1943.6	3577.3	5137.4	5313.3	4884.7	4037.6	3332.8	1942.6
75°	196.4	207.7	271.1	696.6	2095.0	3865.7	4086.7	3773.7	2947.1	1978.4	861.3
77.5°	133.0	138.1	179.0	245.5	615.8	2204.5	2425.4	2083.8	1318.6	673.1	383.6
80°	99.2	102.3	129.9	173.9	255.7	751.9	886.9	704.8	328.4	373.4	273.1
82.5°	69.6	71.6	98.2	127.9	169.8	175.9	234.3	258.8	212.8	244.5	159.6
85°	48.1	48.1	71.6	88.0	107.4	87.0	93.1	129.9	144.2	145.3	97.2
87.5°	25.6	28.6	41.9	56.3	56.3	39.9	44.0	66.5	80.8	87.0	58.3
90°	9.2	9.2	17.4	21.5	13.3	10.2	9.2	13.3	19.4	27.6	18.4
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4	907.4
2.5°	903.3	897.1	888.9	884.9	882.8	878.7	874.6	872.6	872.6	868.5	869.5
5°	874.6	865.4	854.2	846.0	845.0	845.0	847.0	847.0	848.0	845.0	849.0
7.5°	860.3	850.1	833.7	824.5	817.3	816.3	820.4	828.6	832.7	829.6	833.7
10°	850.1	838.8	820.4	809.2	804.0	802.0	805.1	813.2	826.5	826.5	830.6
12.5°	839.8	825.5	807.1	798.9	794.8	795.9	799.9	806.1	820.4	825.5	827.6
15°	829.6	813.2	797.9	786.6	786.6	789.7	794.8	802.0	815.3	824.5	826.5
17.5°	819.4	803.0	789.7	780.5	780.5	784.6	789.7	798.9	808.1	821.4	821.4
20°	810.2	796.9	779.5	771.3	770.3	773.4	779.5	788.7	795.9	809.2	810.2
22.5°	805.1	788.7	772.3	760.1	754.9	752.9	759.0	768.2	775.4	788.7	790.7
25°	803.0	784.6	764.1	741.6	728.3	724.2	727.3	738.6	744.7	754.9	758.0
27.5°	810.2	792.8	761.1	720.2	692.5	681.3	684.4	691.5	693.6	704.8	709.9
30°	834.7	814.3	767.2	697.7	647.5	627.1	627.1	628.1	631.2	640.4	641.4
32.5°	874.6	855.2	785.6	674.1	601.5	572.9	565.7	560.6	560.6	559.6	560.6
35°	948.3	931.9	817.3	647.5	551.4	519.7	502.3	493.1	483.9	479.8	478.7
37.5°	1054.7	1040.3	862.3	616.8	507.4	475.7	454.2	435.8	425.5	424.5	429.6
40°	1213.2	1198.9	912.5	582.1	465.4	441.9	419.4	400.0	388.7	389.7	394.9
42.5°	1408.6	1364.6	966.7	535.0	431.7	419.4	394.9	378.5	367.2	361.1	360.1
45°	1636.7	1563.1	1017.8	491.0	394.9	400.0	376.4	358.0	343.7	327.3	325.3
47.5°	1921.1	1761.5	1062.8	447.0	355.0	379.5	357.0	339.6	318.1	298.7	295.6
50°	2217.8	1989.6	1101.7	400.0	319.2	357.0	337.6	314.0	284.4	267.0	267.0
52.5°	2560.4	2263.8	1151.8	347.8	291.5	332.5	313.0	282.3	257.8	255.7	255.7
55°	2942.0	2551.2	1186.6	306.9	270.1	305.9	296.7	287.4	279.3	281.3	282.3
57.5°	3341.0	2851.0	1155.9	278.2	252.7	299.7	326.3	314.0	288.5	287.4	286.4
60°	3684.7	3084.2	986.1	259.8	239.4	310.0	349.8	314.0	288.5	301.8	302.8
62.5°	3909.7	3194.7	656.7	236.3	219.9	292.6	341.7	304.8	289.5	327.3	330.4
65°	3879.0	3070.9	377.5	219.9	207.7	269.0	330.4	293.6	270.1	291.5	285.4
67.5°	3421.8	2573.7	273.1	212.8	198.5	252.7	310.0	277.2	251.6	278.2	267.0
70°	2459.2	1752.3	235.3	206.6	192.3	233.2	295.6	267.0	241.4	259.8	242.4
72°	1650.0	1065.9	215.8	201.5	186.2	221.0	285.4	258.8	232.2	242.4	223.0
72.5°	1404.5	840.9	210.7	199.5	184.1	217.9	282.3	256.8	230.2	240.4	222.0
75°	524.8	329.4	187.2	184.1	169.8	202.5	270.1	247.6	219.9	216.9	208.7
77.5°	270.1	208.7	159.6	162.6	152.4	185.2	256.8	233.2	202.5	191.3	187.2
80°	196.4	151.4	128.9	138.1	129.9	166.7	238.3	211.8	184.1	171.9	166.7
82.5°	123.8	94.1	98.2	109.5	110.5	147.3	216.9	190.3	163.7	153.4	145.3
85°	59.3	56.3	69.6	80.8	89.0	124.8	198.5	168.8	143.2	122.8	123.8
87.5°	31.7	43.0	41.9	54.2	68.5	102.3	175.9	138.1	114.6	92.1	93.1
90°	7.2	11.3	12.3	21.5	27.6	44.0	113.5	78.8	76.7	32.7	28.6
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226749

CATALOG NUMBER: IST-AF-1200-LED-E1-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)