

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: P226487

Luminaire Tested: **IST-AF-800-LED-E1-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226487
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-800-LED-E1-T3
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5251.3 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Cutoff
BUG Rating: B1 - U1 - G1

Input Watts (W): 43.5
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

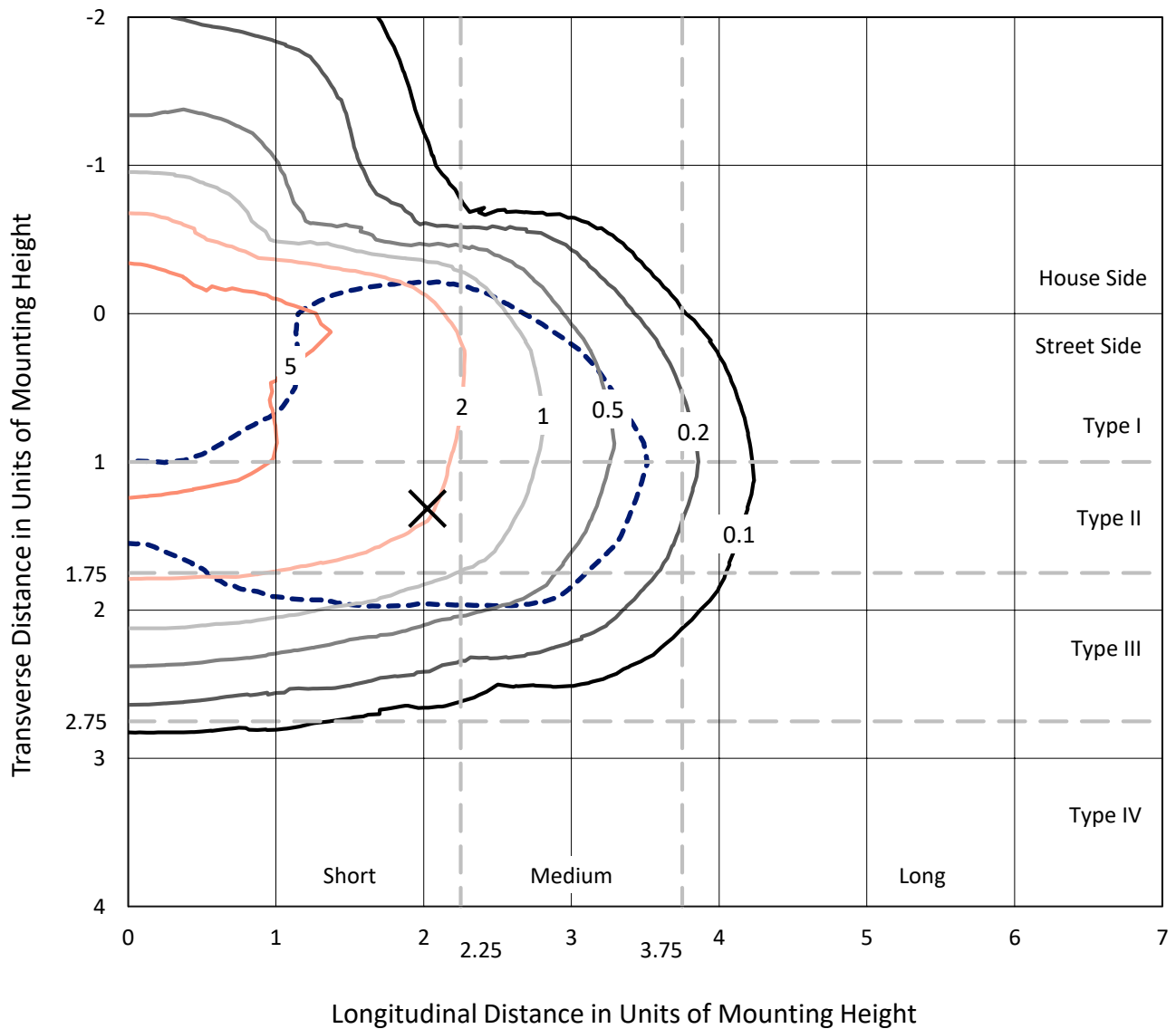


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

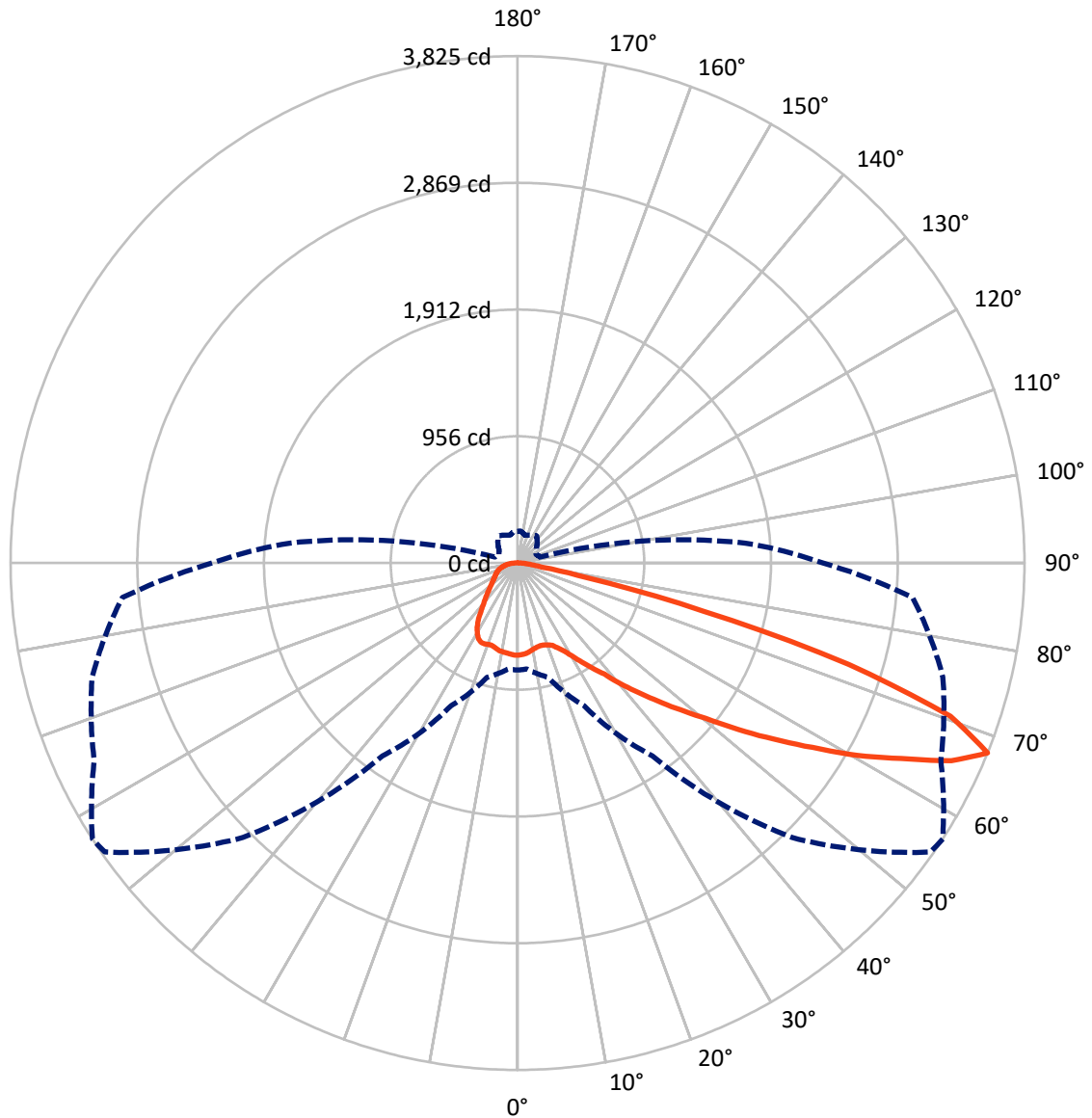


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type III - Short - Cutoff

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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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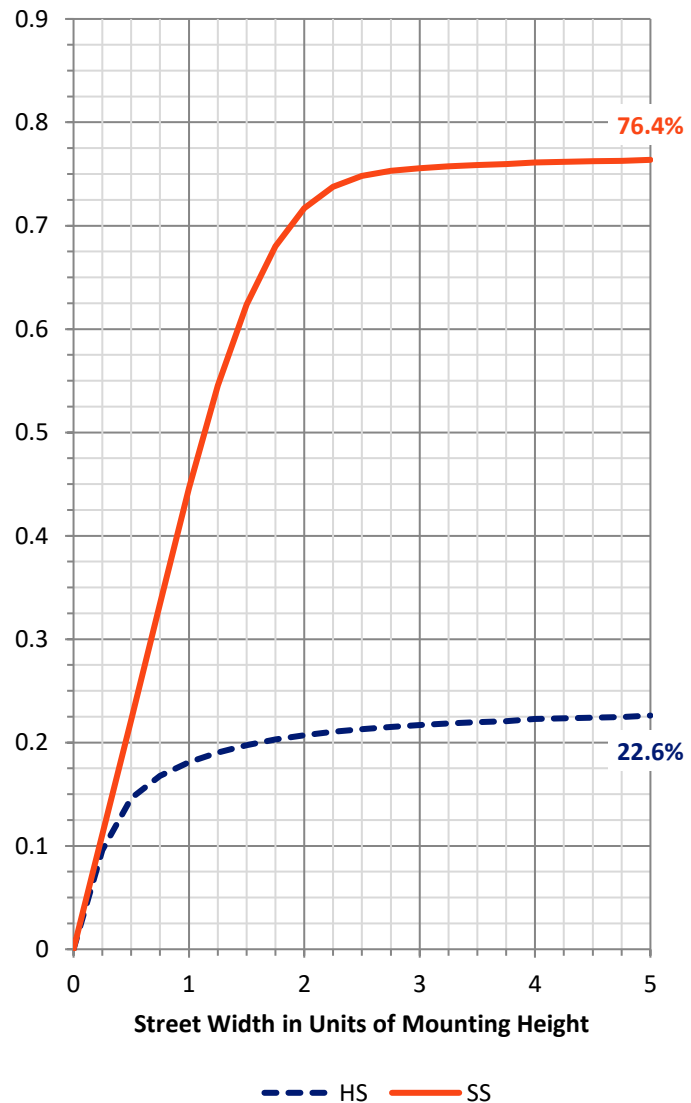
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1222.0	1.5	1223.6
	% Fixture	23.3	0.0	23.3
Street Side	Lumens	4027.3	0.4	4027.7
	% Fixture	76.7	0.0	76.7
Total	Lumens	5249.3	2.0	5251.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	1.2
10°-20°	187.1	3.6
20°-30°	321.9	6.1
30°-40°	523.4	10.0
40°-50°	844.3	16.1
50°-60°	1258.7	24.0
60°-70°	1417.6	27.0
70°-80°	546.5	10.4
80°-90°	84.7	1.6
90°-100°	2.0	0.0
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°	5249.3	100.0
0°-180°	5251.3	100.0



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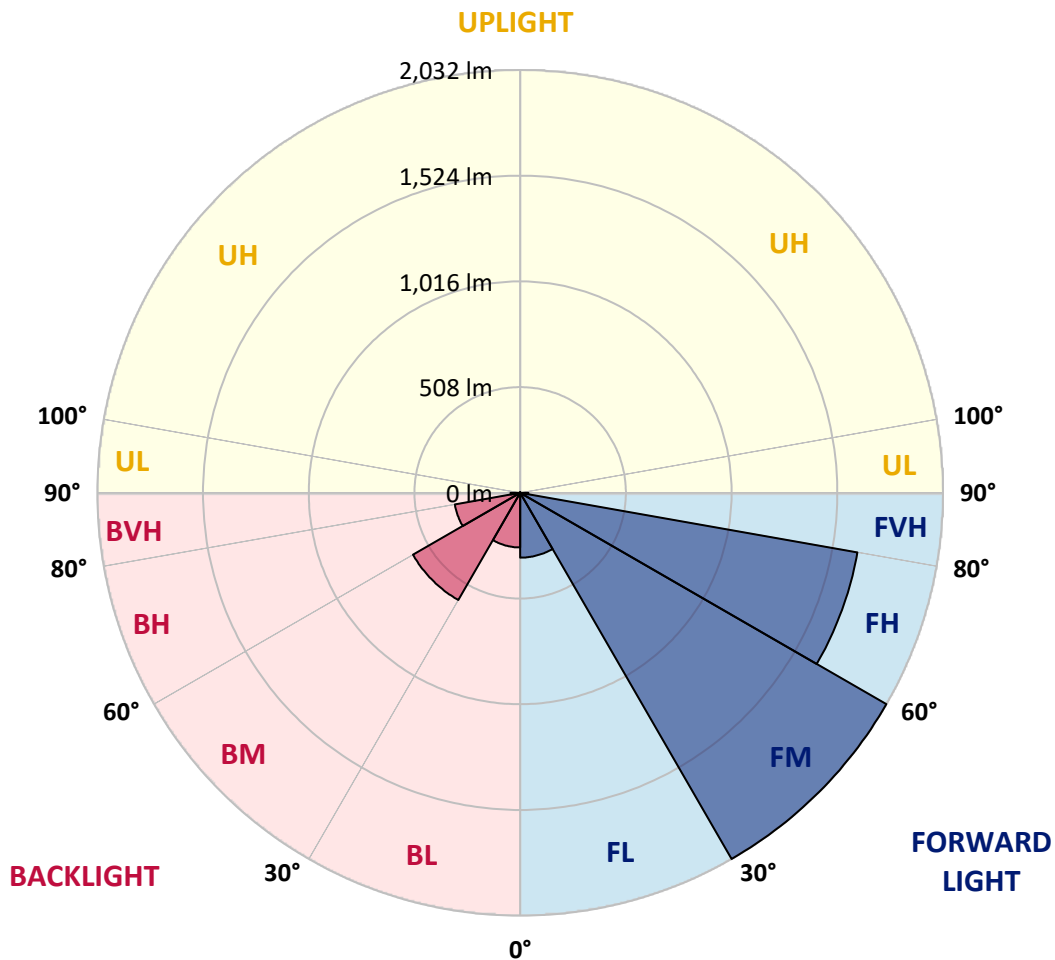
CATALOG NUMBER: IST-AF-800-LED-E1-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	311.5	5.9			
FM	(30°-60°)	2031.6	38.7			
FH	(60°-80°)	1645.3	31.3			G1/1800
FVH	(80°-90°)	38.9	0.7			G1/100
BL	(0°-30°)	262.6	5.0	B1/500		
BM	(30°-60°)	594.8	11.3	B1/1000		
BH	(60°-80°)	318.9	6.1	B1/500		G1/500
BVH	(80°-90°)	45.8	0.9			G1/100
UL	(90°-100°)	2.0	0.0		U1/10	
UH	(100°-180°)	1.5	0.0		U1/10	

BUG Rating: B1-U1-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9
2.5°	690.6	692.1	693.6	692.8	692.8	692.8	692.8	691.3	693.6	693.6	692.1
5°	679.1	680.0	680.7	682.2	683.7	685.3	686.0	686.0	686.8	686.0	684.5
7.5°	662.5	663.2	666.2	666.2	667.8	670.7	672.3	673.8	676.1	676.1	675.4
10°	657.1	657.1	657.1	654.8	656.3	657.1	659.4	659.4	665.4	668.5	670.0
12.5°	663.2	662.5	662.5	656.3	651.0	648.8	651.0	651.8	658.6	663.2	666.2
15°	676.9	676.9	675.4	666.2	655.6	647.2	646.5	646.5	651.8	658.6	664.0
17.5°	708.8	711.9	701.2	686.8	669.3	655.6	650.3	649.5	653.3	658.6	664.0
20°	769.7	768.8	752.9	727.1	696.6	673.8	660.9	659.4	658.6	661.6	667.8
22.5°	841.9	838.8	819.9	787.2	745.3	703.5	678.4	675.4	669.3	671.6	680.0
25°	919.5	920.2	896.7	854.1	801.6	751.5	713.4	710.3	697.4	695.9	705.0
27.5°	997.1	1007.0	975.0	934.7	872.4	812.2	756.8	752.2	740.7	736.9	746.0
30°	1110.4	1106.6	1067.0	1014.6	952.2	876.9	823.7	815.3	792.5	797.8	807.7
32.5°	1206.2	1214.5	1178.8	1116.4	1034.3	955.2	893.6	889.0	867.1	873.1	886.8
35°	1323.3	1343.1	1296.0	1219.2	1140.1	1058.7	984.9	972.7	955.2	967.4	978.0
37.5°	1457.2	1467.1	1430.6	1331.7	1251.1	1165.9	1082.3	1063.3	1044.2	1069.3	1088.3
40°	1585.0	1600.9	1553.8	1470.1	1376.6	1295.2	1203.9	1200.1	1156.0	1183.3	1232.9
42.5°	1774.3	1794.1	1718.8	1621.5	1537.1	1438.9	1352.2	1331.7	1283.8	1322.6	1405.4
45°	1906.7	1905.9	1854.9	1774.3	1722.6	1627.5	1510.4	1486.0	1434.4	1486.0	1597.1
47.5°	1954.6	1966.0	1948.5	1938.6	1920.4	1851.1	1678.5	1655.6	1607.1	1683.8	1786.5
50°	2025.3	2022.3	2022.3	2083.1	2135.6	2121.1	1875.5	1842.7	1791.8	1883.9	2031.4
52.5°	2043.5	2016.1	2058.8	2175.1	2341.6	2353.8	2104.4	2086.1	2025.3	2115.1	2296.8
55°	1992.6	1985.8	2053.5	2222.3	2484.6	2571.4	2369.9	2344.7	2276.3	2353.1	2583.6
57.5°	1878.5	1896.0	2004.8	2212.4	2583.6	2763.0	2661.1	2625.4	2527.3	2573.6	2867.9
60°	1759.2	1767.5	1911.2	2177.5	2610.2	2896.1	2966.9	2946.3	2778.2	2805.6	3078.7
62.5°	1626.8	1607.1	1756.1	2148.5	2580.5	3079.4	3263.4	3247.5	3049.0	3040.6	3228.4
65°	1257.2	1284.5	1411.6	1775.8	2377.4	3222.4	3617.2	3596.6	3350.9	3234.6	3212.5
67.5°	807.7	802.4	892.1	1187.2	1776.6	2928.8	3801.9	3824.7	3523.6	3322.0	2991.9
70°	289.8	298.1	331.6	539.2	974.3	1951.5	3351.7	3465.0	3396.5	3158.5	2435.2
72.5°	176.5	176.5	200.8	242.6	394.8	925.6	2388.8	2613.2	2772.2	2602.6	1798.7
75°	138.4	137.7	146.0	167.4	213.0	303.4	1270.1	1443.5	1778.1	1797.9	1023.7
77.5°	109.6	108.7	117.1	127.1	159.0	160.5	405.4	527.8	816.0	768.1	365.8
80°	88.2	87.5	93.5	96.6	116.4	111.0	162.8	188.6	285.9	250.9	158.1
82.5°	79.9	79.9	85.9	73.8	80.6	78.4	101.2	108.0	143.7	149.0	95.0
85°	51.8	53.2	80.6	71.5	52.5	47.9	64.7	68.4	89.7	98.1	46.4
87.5°	24.3	26.6	61.6	59.3	35.0	25.9	36.5	38.8	48.7	60.0	27.4
90°	4.6	4.6	7.6	8.4	4.6	4.6	6.0	5.3	5.3	7.6	7.6
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
110°	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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CATALOG NUMBER: IST-AF-800-LED-E1-T3

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
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°	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9
2.5°	694.4	692.8	693.6	694.4	695.1	697.4	698.2	698.2	698.2	697.4	699.0
5°	686.0	684.5	684.5	686.8	689.1	692.1	696.6	700.4	701.9	702.8	702.8
7.5°	676.9	675.4	676.1	680.0	683.7	686.0	690.6	692.8	699.0	699.0	700.4
10°	670.7	672.3	673.1	676.9	680.0	680.0	679.1	677.6	676.1	680.0	678.4
12.5°	667.0	669.3	668.5	673.1	674.6	668.5	659.4	647.2	645.7	647.2	648.8
15°	665.4	665.4	667.8	667.8	660.1	647.9	636.6	637.3	638.8	643.4	643.4
17.5°	665.4	666.2	667.8	662.5	648.8	638.1	635.8	633.5	625.1	622.9	620.6
20°	670.7	669.3	670.7	660.9	648.8	640.4	622.9	606.1	590.1	583.3	580.3
22.5°	683.7	681.5	680.7	670.7	655.6	627.5	593.2	567.3	540.0	530.8	527.8
25°	706.6	705.7	700.4	693.6	651.0	596.3	552.9	511.9	482.2	466.2	467.0
27.5°	746.9	746.9	743.8	713.4	627.5	557.5	498.9	457.1	426.7	411.4	409.2
30°	807.7	809.3	810.7	718.7	590.1	500.4	439.6	411.4	393.2	381.8	381.0
32.5°	883.0	891.3	881.5	712.6	539.2	431.2	393.2	383.3	374.2	366.6	365.8
35°	982.6	1005.5	943.1	688.2	482.2	384.1	365.1	358.2	351.4	346.1	346.8
37.5°	1116.4	1138.5	982.6	647.2	409.2	357.4	349.1	338.4	327.8	316.4	314.9
40°	1274.7	1267.8	996.3	569.7	363.6	344.5	333.1	319.5	301.2	284.5	281.4
42.5°	1432.8	1387.2	984.9	473.8	333.9	333.1	317.1	299.6	281.4	267.0	267.0
45°	1610.0	1492.2	949.9	384.1	310.3	320.9	301.2	282.9	266.2	255.5	254.8
47.5°	1777.4	1590.3	892.1	320.2	286.7	304.9	289.0	272.3	256.2	247.1	244.9
50°	1973.6	1702.1	848.0	276.8	263.9	289.0	282.1	267.0	251.7	241.1	239.6
52.5°	2172.1	1810.8	814.6	247.1	243.4	276.8	279.2	270.0	254.0	233.4	232.0
55°	2379.7	1947.0	747.6	223.6	225.2	267.7	282.9	276.1	264.6	231.2	229.7
57.5°	2553.9	2072.5	630.4	207.7	210.6	260.9	284.5	271.5	258.6	232.7	230.5
60°	2690.1	2158.4	462.4	194.7	197.7	253.3	277.6	255.5	238.9	232.7	228.9
62.5°	2731.9	2161.4	307.3	179.5	187.8	240.3	265.5	247.1	227.4	230.5	228.9
65°	2626.9	2047.3	219.8	165.0	179.5	225.2	260.1	238.9	222.1	234.3	232.7
67.5°	2303.7	1724.9	176.5	153.6	168.1	209.2	250.2	231.2	217.5	242.6	238.0
70°	1794.9	1237.4	149.9	142.2	155.9	194.0	236.5	222.8	211.4	235.8	229.7
72.5°	1183.3	728.5	132.4	131.6	141.5	181.0	221.4	215.2	201.5	213.7	204.6
75°	617.6	337.7	114.9	119.4	125.5	169.6	207.7	201.5	186.4	190.9	187.8
77.5°	242.6	158.1	99.6	105.0	111.8	152.8	190.2	184.0	171.1	167.4	166.5
80°	133.1	106.5	82.9	89.7	94.3	137.7	171.9	165.0	151.4	149.0	146.8
82.5°	84.4	69.3	68.4	73.0	79.1	122.4	154.4	143.7	132.4	155.9	126.2
85°	39.6	41.0	48.7	54.7	61.6	104.2	134.6	123.2	111.8	108.7	96.6
87.5°	22.1	27.4	31.9	37.2	42.6	73.0	106.5	95.9	83.7	71.5	73.8
90°	5.3	5.3	9.1	8.4	9.1	10.6	52.5	47.2	41.8	19.7	12.9
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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226487

CATALOG NUMBER: IST-AF-800-LED-E1-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
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)