

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: P271660

Luminaire Tested: **IST-AF-800-LED-E1-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271660
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-800-LED-E1-T4W-7027
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 2700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4453.5 lumens
Efficiency: N/A
Efficacy: 102.4 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 - G1

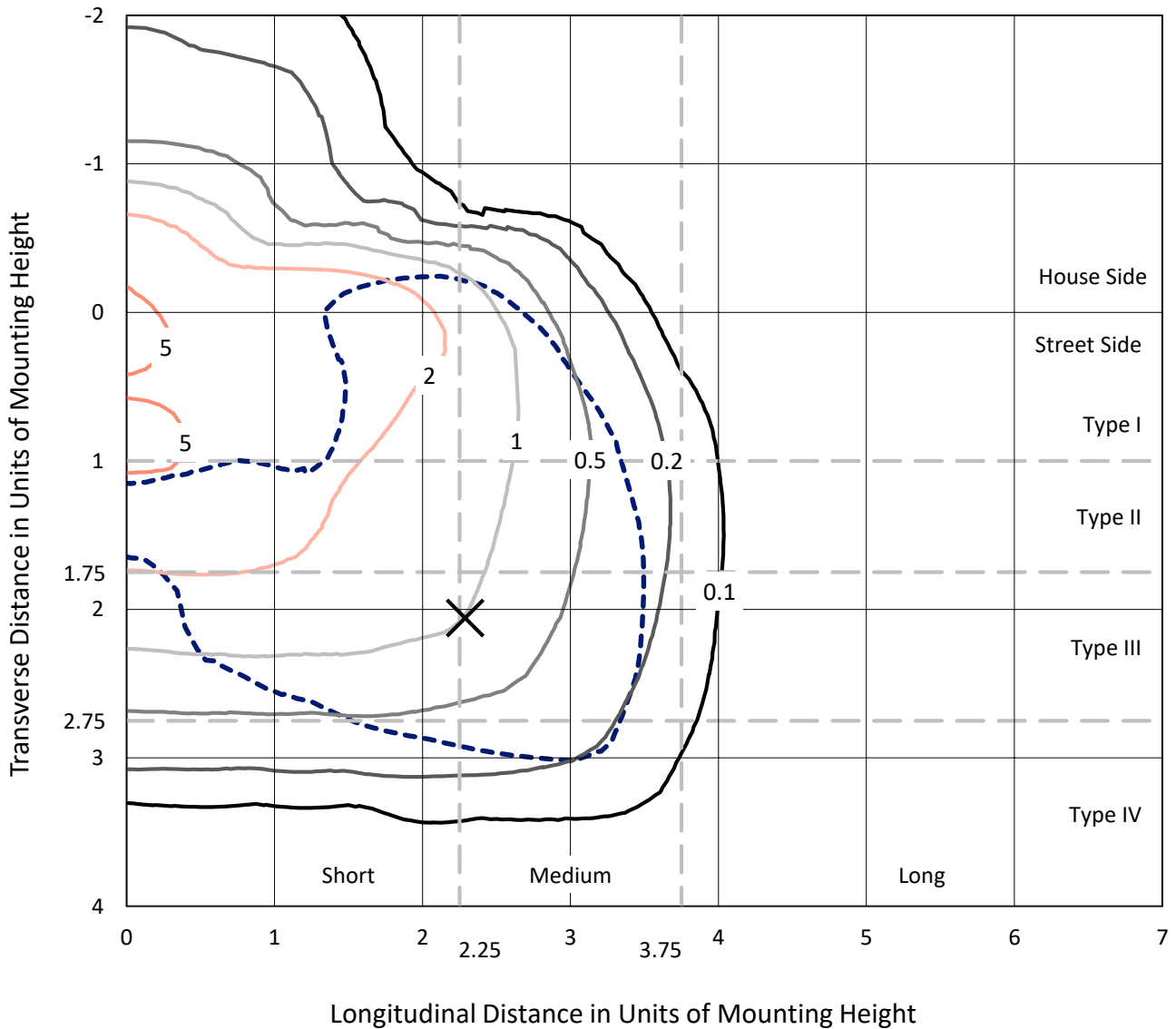
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

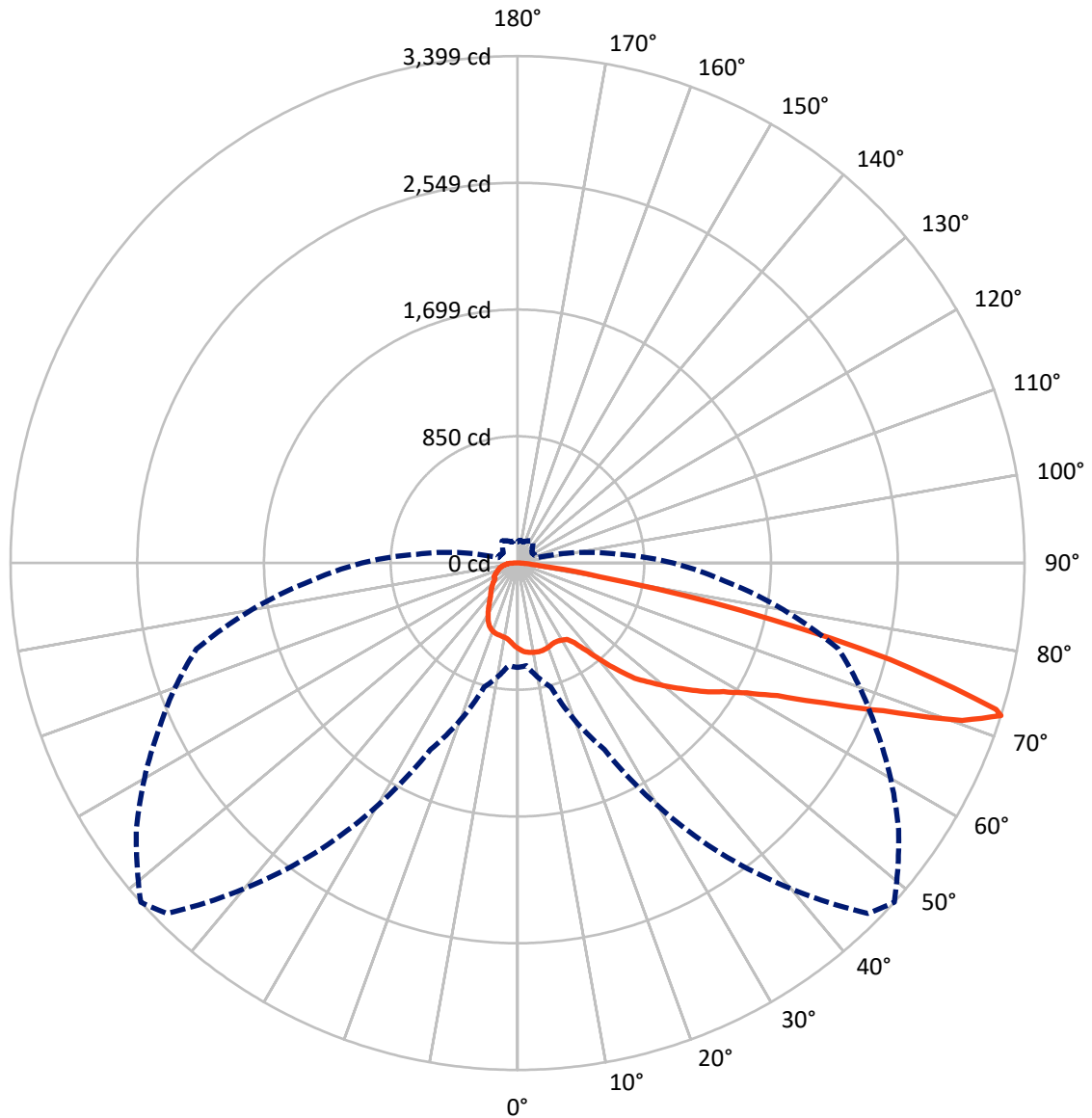
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 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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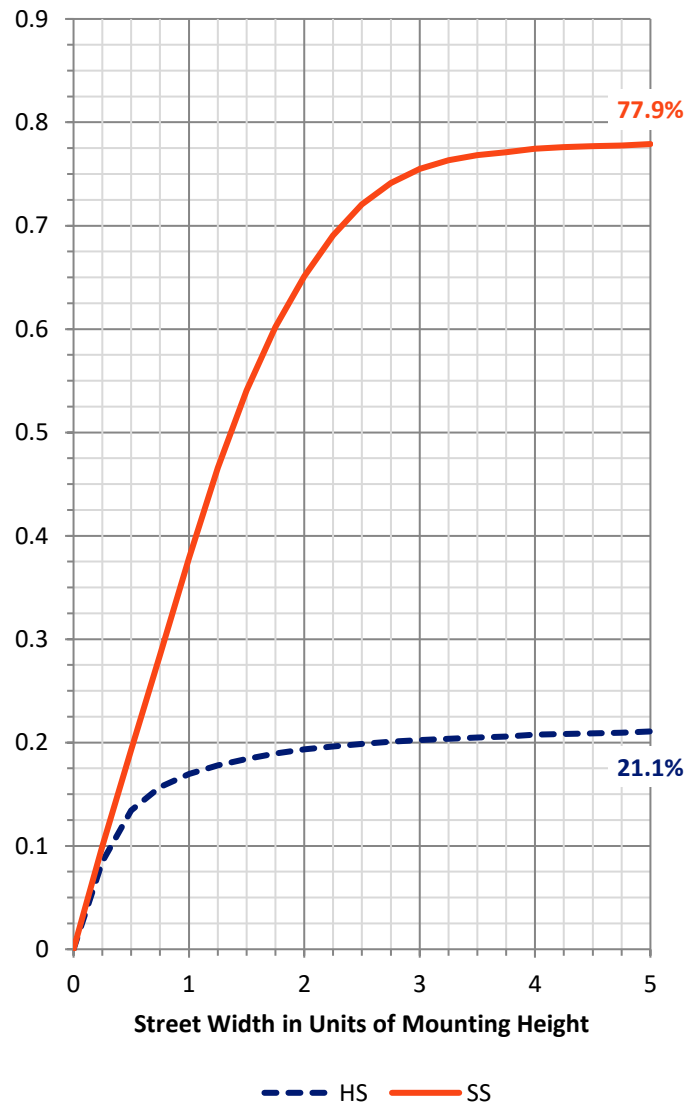
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	967.3	2.0	969.3
	% Fixture	21.7	0.0	21.8
Street Side	Lumens	3483.5	0.7	3484.2
	% Fixture	78.2	0.0	78.2
Total	Lumens	4450.8	2.7	4453.5
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.2
10°-20°	158.2	3.6
20°-30°	244.0	5.5
30°-40°	365.7	8.2
40°-50°	609.0	13.7
50°-60°	951.8	21.4
60°-70°	1257.2	28.2
70°-80°	727.2	16.3
80°-90°	83.4	1.9
90°-100°	2.7	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°	4450.8	99.9
0°-180°	4453.5	100.0



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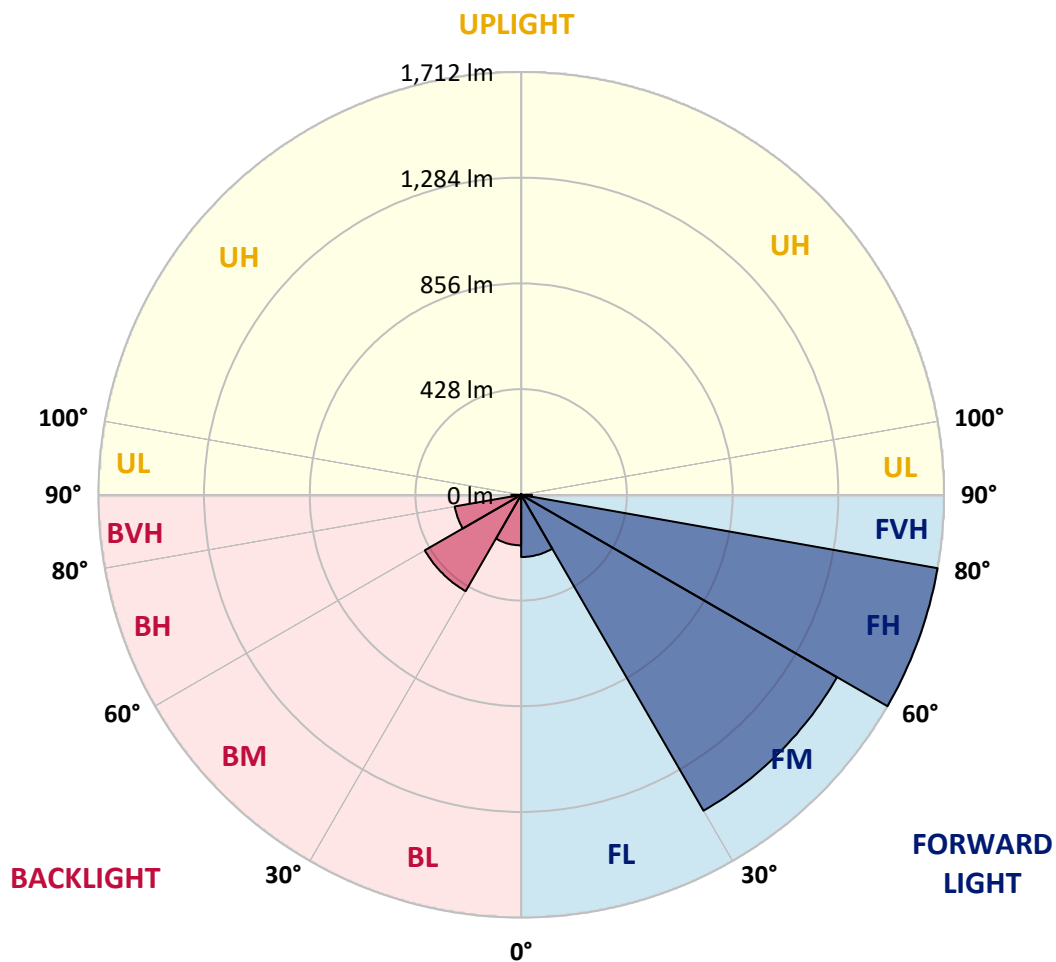
CATALOG NUMBER: IST-AF-800-LED-E1-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	251.8	5.7			
FM	(30°-60°)	1476.5	33.2			
FH	(60°-80°)	1711.5	38.4			G1/1800
FVH	(80°-90°)	43.8	1.0			G1/100
BL	(0°-30°)	204.6	4.6	B1/500		
BM	(30°-60°)	450.1	10.1	B1/1000		
BH	(60°-80°)	272.9	6.1	B1/500		G1/500
BVH	(80°-90°)	39.6	0.9			G1/100
UL	(90°-100°)	2.7	0.1		U1/10	
UH	(100°-180°)	2.0	0.0		U1/10	

BUG Rating: B1-U1-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8
2.5°	603.3	602.7	602.7	597.5	595.6	592.3	589.6	585.9	581.9	577.4	571.6
5°	632.4	634.3	631.7	624.0	614.4	603.9	600.1	591.1	578.8	567.8	557.4
7.5°	660.2	660.7	653.7	640.7	625.8	609.7	604.6	592.3	578.8	563.9	549.0
10°	680.2	680.7	670.5	652.3	632.4	614.4	608.4	596.1	579.4	563.2	544.6
12.5°	691.8	692.4	677.0	658.2	634.3	616.1	611.0	598.1	580.7	560.0	539.3
15°	689.8	691.8	678.8	658.2	632.9	616.9	610.4	599.3	577.4	556.8	534.9
17.5°	677.0	679.5	669.1	646.6	626.6	613.6	606.5	595.6	574.2	552.3	528.3
20°	651.7	655.0	650.5	628.5	614.9	604.6	600.1	589.6	569.6	547.1	522.5
22.5°	623.3	626.6	625.2	607.2	600.7	595.6	591.1	583.3	565.8	543.3	520.0
25°	602.7	605.2	603.3	587.9	589.6	589.6	587.1	581.3	565.1	544.6	520.0
27.5°	636.9	636.9	620.1	588.4	585.2	591.1	589.6	586.5	573.6	551.0	525.1
30°	762.2	752.5	722.1	642.6	602.0	599.3	598.8	596.8	585.2	565.1	541.3
32.5°	902.3	892.6	856.4	757.0	672.4	616.9	611.0	611.7	608.4	589.6	565.8
35°	1027.0	1025.8	997.3	889.4	781.5	678.2	655.0	639.4	638.2	630.4	611.7
37.5°	1127.7	1127.7	1130.3	1007.6	899.7	775.8	736.3	687.2	687.2	682.7	671.1
40°	1242.7	1247.8	1253.8	1114.9	1026.3	891.9	847.4	773.1	750.5	757.6	760.2
42.5°	1393.9	1400.4	1396.4	1247.3	1141.9	1030.9	976.0	886.2	830.7	842.3	869.4
45°	1495.9	1498.6	1526.3	1385.5	1287.3	1148.4	1102.0	978.5	923.6	947.5	995.3
47.5°	1611.6	1617.9	1622.5	1542.4	1457.8	1281.5	1196.3	1068.4	1032.8	1069.1	1144.6
50°	1724.6	1716.2	1728.5	1725.3	1619.4	1399.6	1298.3	1152.3	1155.0	1204.0	1328.1
52.5°	1822.8	1794.4	1822.8	1858.2	1827.3	1521.1	1403.0	1251.1	1288.6	1348.6	1544.4
55°	1898.4	1829.8	1877.6	1978.4	1971.3	1628.4	1522.4	1382.9	1445.6	1527.6	1807.3
57.5°	1744.0	1752.3	1884.1	2059.2	2056.0	1736.9	1627.1	1547.6	1624.5	1716.2	2118.7
60°	1599.9	1637.4	1840.9	2072.1	2114.7	1855.1	1767.9	1735.0	1806.0	1917.7	2417.0
62.5°	1523.7	1559.2	1770.4	2048.1	2208.3	2030.1	1957.0	1932.0	2028.8	2154.1	2683.1
65°	1547.6	1569.6	1765.9	2084.3	2316.2	2294.9	2263.3	2221.3	2269.7	2387.2	2803.3
67.5°	1480.5	1516.6	1728.5	2148.3	2513.3	2617.9	2644.4	2599.2	2558.5	2542.3	2628.2
70°	1102.0	1136.9	1359.0	1884.1	2674.7	3178.6	3162.4	3011.3	2737.3	2508.8	2053.3
72°	700.2	690.4	860.4	1380.3	2377.6	3322.7	3398.7	3119.2	2656.0	2227.8	1394.5
72.5°	509.0	554.8	713.7	1227.3	2258.8	3243.8	3354.9	3084.2	2549.4	2104.4	1226.5
75°	124.1	131.2	171.1	439.9	1322.8	2441.0	2580.4	2382.8	1860.9	1249.3	543.8
77.5°	84.0	87.1	113.1	155.0	388.9	1391.9	1531.5	1315.7	832.5	425.0	242.3
80°	62.6	64.6	82.0	109.9	161.4	474.8	560.0	445.0	207.3	235.7	172.5
82.5°	43.9	45.3	62.1	80.8	107.2	111.1	148.0	163.4	134.4	154.4	100.8
85°	30.4	30.4	45.3	55.5	67.8	54.9	58.7	82.0	91.1	91.6	61.4
87.5°	16.2	18.1	26.5	35.6	35.6	25.2	27.8	42.0	51.0	54.9	36.8
90°	5.7	5.7	11.0	13.6	8.4	6.5	5.7	8.4	12.3	17.4	11.6
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



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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°	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8	572.8
2.5°	570.3	566.5	561.4	558.7	557.4	554.8	552.3	551.0	551.0	548.3	549.0
5°	552.3	546.5	539.3	534.1	533.5	533.5	534.9	534.9	535.5	533.5	536.1
7.5°	543.3	536.7	526.5	520.6	516.1	515.4	518.1	523.3	525.8	523.8	526.5
10°	536.7	529.6	518.1	511.0	507.7	506.4	508.4	513.5	521.8	521.8	524.5
12.5°	530.3	521.3	509.6	504.5	501.8	502.5	505.0	509.0	518.1	521.3	522.5
15°	523.8	513.5	503.8	496.8	496.8	498.6	501.8	506.4	514.8	520.6	521.8
17.5°	517.3	507.0	498.6	492.8	492.8	495.4	498.6	504.5	510.2	518.7	518.7
20°	511.6	503.2	492.2	487.0	486.3	488.3	492.2	498.0	502.5	511.0	511.6
22.5°	508.4	498.0	487.7	480.0	476.7	475.5	479.2	485.1	489.6	498.0	499.3
25°	507.0	495.4	482.5	468.3	459.9	457.2	459.2	466.3	470.3	476.7	478.7
27.5°	511.6	500.5	480.5	454.7	437.3	430.2	432.2	436.7	437.9	445.0	448.3
30°	527.0	514.1	484.5	440.5	408.9	396.0	396.0	396.6	398.5	404.3	405.0
32.5°	552.3	540.0	496.0	425.7	379.8	361.7	357.2	353.9	353.9	353.3	353.9
35°	598.8	588.4	516.1	408.9	348.1	328.2	317.1	311.4	305.5	302.9	302.3
37.5°	665.9	656.9	544.6	389.4	320.3	300.3	286.8	275.2	268.8	268.1	271.3
40°	766.1	757.0	576.2	367.6	293.8	279.0	264.8	252.5	245.5	246.0	249.3
42.5°	889.4	861.7	610.4	337.9	272.5	264.8	249.3	238.9	231.9	228.0	227.5
45°	1033.5	987.0	642.6	310.1	249.3	252.5	237.7	226.0	217.0	206.7	205.4
47.5°	1213.0	1112.2	671.1	282.2	224.1	239.7	225.5	214.4	201.0	188.6	186.7
50°	1400.4	1256.3	695.6	252.5	201.5	225.5	213.2	198.3	179.6	168.6	168.6
52.5°	1616.7	1429.5	727.3	219.6	184.2	209.9	197.6	178.2	162.8	161.4	161.4
55°	1857.7	1610.9	749.3	193.8	170.5	193.1	187.3	181.5	176.3	177.7	178.2
57.5°	2109.5	1800.1	730.0	175.7	159.6	189.3	206.0	198.3	182.2	181.5	180.9
60°	2326.6	1947.4	622.6	164.1	151.2	195.7	220.9	198.3	182.2	190.5	191.2
62.5°	2468.7	2017.1	414.7	149.2	138.9	184.7	215.8	192.5	182.7	206.7	208.7
65°	2449.3	1939.0	238.3	138.9	131.2	169.9	208.7	185.4	170.5	184.2	180.2
67.5°	2160.5	1625.1	172.5	134.4	125.3	159.6	195.7	175.0	158.9	175.7	168.6
70°	1552.8	1106.4	148.6	130.4	121.5	147.2	186.7	168.6	152.4	164.1	153.1
72°	1041.9	673.0	136.4	127.2	117.6	139.5	180.2	163.4	146.6	153.1	140.9
72.5°	886.9	531.0	133.1	125.9	116.3	137.6	178.2	162.1	145.3	151.8	140.1
75°	331.4	208.0	118.1	116.3	107.2	127.9	170.5	156.3	138.9	136.9	131.8
77.5°	170.5	131.8	100.8	102.7	96.3	116.9	162.1	147.2	127.9	120.8	118.1
80°	124.1	95.6	81.4	87.1	82.0	105.3	150.5	133.7	116.3	108.5	105.3
82.5°	78.2	59.4	62.1	69.1	69.8	93.1	136.9	120.1	103.3	96.8	91.6
85°	37.5	35.6	43.9	51.0	56.2	78.8	125.3	106.6	90.4	77.5	78.2
87.5°	20.0	27.1	26.5	34.2	43.3	64.6	111.1	87.1	72.3	58.1	58.7
90°	4.5	7.1	7.7	13.6	17.4	27.8	71.7	49.8	48.5	20.8	18.1
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: P271660

CATALOG NUMBER: IST-AF-800-LED-E1-T4W-7027

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)