

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: P226464

Luminaire Tested: **IST-AF-450-LED-E1-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226464
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-450-LED-E1-T3-7030
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III
Light Source: (16) 3000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2782.7 lumens
Efficiency: N/A
Efficacy: 109.9 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

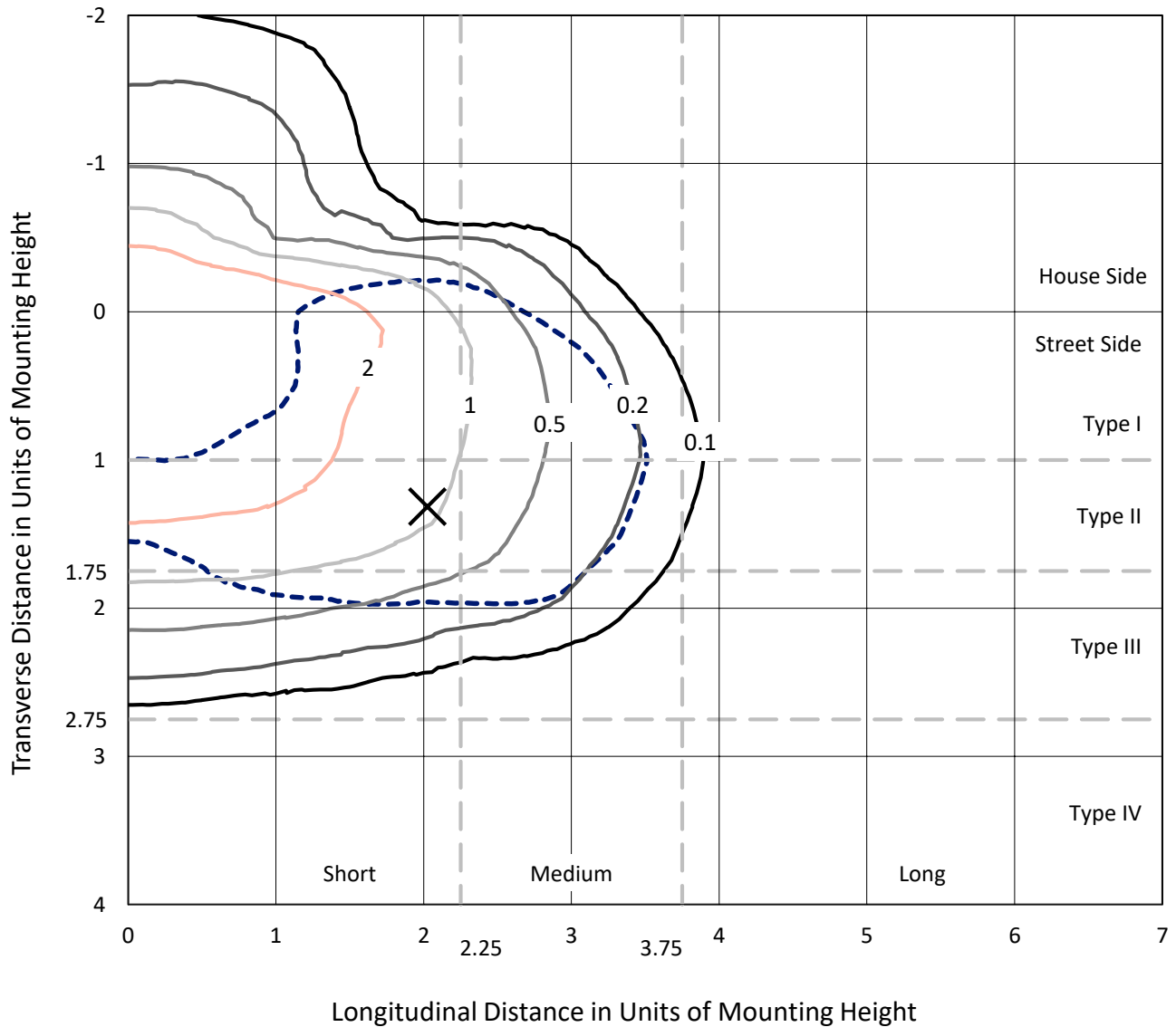
Input Watts (W): 25.31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

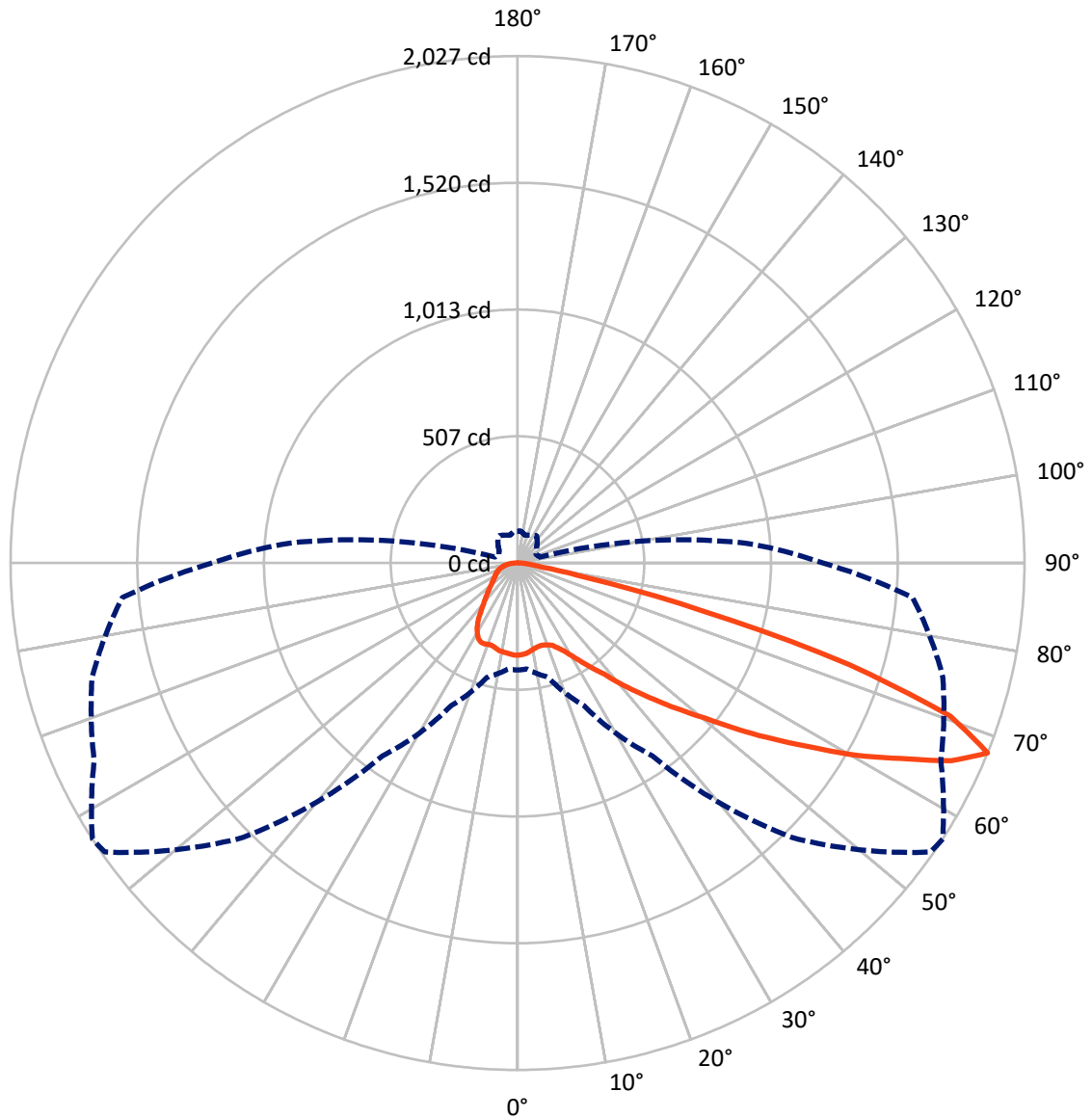
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.9 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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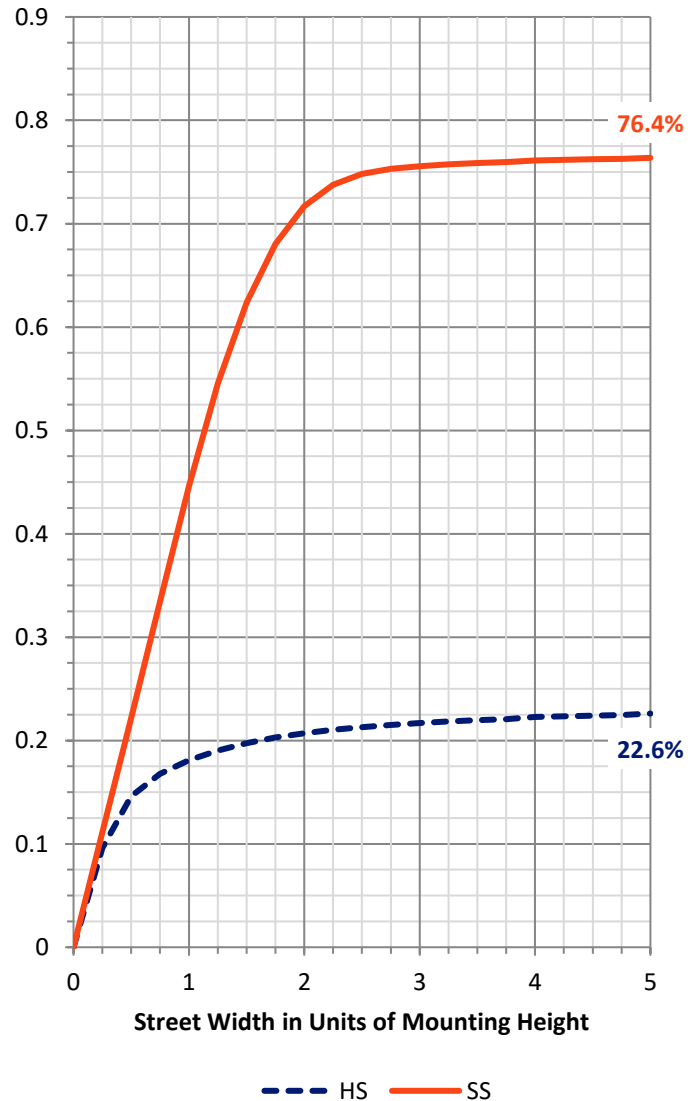
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	647.6	0.8	648.4
	% Fixture	23.3	0.0	23.3
Street Side	Lumens	2134.1	0.2	2134.3
	% Fixture	76.7	0.0	76.7
Total	Lumens	2781.6	1.0	2782.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	1.2
10°-20°	99.1	3.6
20°-30°	170.6	6.1
30°-40°	277.4	10.0
40°-50°	447.4	16.1
50°-60°	667.0	24.0
60°-70°	751.2	27.0
70°-80°	289.6	10.4
80°-90°	44.9	1.6
90°-100°	1.0	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°	2781.6	100.0
0°-180°	2782.7	100.0



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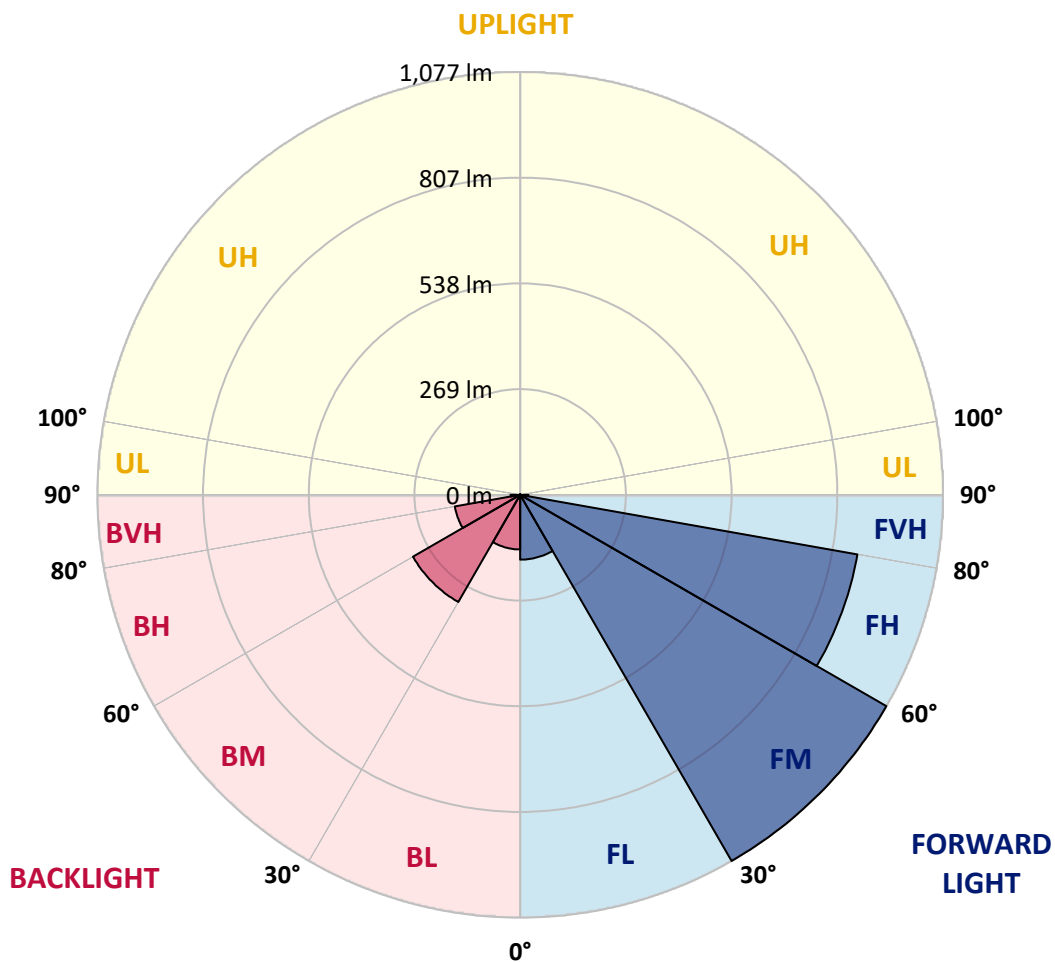
CATALOG NUMBER: IST-AF-450-LED-E1-T3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	165.1	5.9			
FM	(30°-60°)	1076.6	38.7			
FH	(60°-80°)	871.8	31.3			G1/1800
FVH	(80°-90°)	20.6	0.7			G1/100
BL	(0°-30°)	139.1	5.0	B1/500		
BM	(30°-60°)	315.2	11.3	B1/1000		
BH	(60°-80°)	169.0	6.1	B1/500		G1/500
BVH	(80°-90°)	24.3	0.9			G1/100
UL	(90°-100°)	1.0	0.0		U1/10	
UH	(100°-180°)	0.8	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°	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8
2.5°	365.9	366.7	367.5	367.1	367.1	367.1	367.1	366.3	367.5	367.5	366.7
5°	359.9	360.3	360.7	361.5	362.3	363.1	363.5	363.5	363.9	363.5	362.7
7.5°	351.0	351.4	353.0	353.0	353.8	355.5	356.3	357.1	358.3	358.3	357.9
10°	348.2	348.2	348.2	347.0	347.8	348.2	349.4	349.4	352.6	354.2	355.1
12.5°	351.4	351.0	351.0	347.8	345.0	343.8	345.0	345.4	349.0	351.4	353.0
15°	358.7	358.7	357.9	353.0	347.4	343.0	342.6	342.6	345.4	349.0	351.8
17.5°	375.6	377.2	371.6	363.9	354.7	347.4	344.6	344.2	346.2	349.0	351.8
20°	407.8	407.4	399.0	385.3	369.2	357.1	350.2	349.4	349.0	350.6	353.8
22.5°	446.1	444.5	434.4	417.1	395.0	372.8	359.5	357.9	354.7	355.9	360.3
25°	487.2	487.6	475.2	452.6	424.8	398.2	378.0	376.4	369.6	368.8	373.6
27.5°	528.3	533.6	516.7	495.3	462.3	430.4	401.0	398.6	392.5	390.5	395.4
30°	588.4	586.4	565.4	537.6	504.6	464.7	436.5	432.0	419.9	422.8	428.0
32.5°	639.2	643.6	624.7	591.6	548.1	506.2	473.5	471.1	459.4	462.7	469.9
35°	701.2	711.7	686.7	646.0	604.1	561.0	521.9	515.5	506.2	512.6	518.3
37.5°	772.2	777.4	758.1	705.7	663.0	617.8	573.5	563.4	553.3	566.6	576.7
40°	839.9	848.3	823.4	779.0	729.5	686.3	638.0	636.0	612.6	627.1	653.3
42.5°	940.2	950.7	910.8	859.2	814.5	762.5	716.6	705.7	680.3	700.8	744.8
45°	1010.4	1009.9	982.9	940.2	912.8	862.4	800.4	787.5	760.1	787.5	846.3
47.5°	1035.7	1041.8	1032.5	1027.3	1017.6	980.9	889.4	877.4	851.6	892.3	946.7
50°	1073.2	1071.6	1071.6	1103.9	1131.7	1124.0	993.8	976.5	949.5	998.3	1076.4
52.5°	1082.9	1068.4	1091.0	1152.6	1240.9	1247.3	1115.1	1105.5	1073.2	1120.8	1217.1
55°	1055.9	1052.3	1088.1	1177.6	1316.6	1362.6	1255.8	1242.5	1206.2	1246.9	1369.0
57.5°	995.4	1004.7	1062.3	1172.4	1369.0	1464.1	1410.1	1391.2	1339.2	1363.8	1519.8
60°	932.2	936.6	1012.8	1153.8	1383.1	1534.7	1572.2	1561.3	1472.2	1486.7	1631.4
62.5°	862.0	851.6	930.6	1138.5	1367.4	1631.8	1729.3	1720.9	1615.7	1611.2	1710.8
65°	666.2	680.7	748.0	941.0	1259.8	1707.6	1916.7	1905.8	1775.7	1714.0	1702.3
67.5°	428.0	425.2	472.7	629.1	941.4	1552.0	2014.7	2026.8	1867.2	1760.4	1585.5
70°	153.5	158.0	175.7	285.7	516.3	1034.1	1776.1	1836.1	1799.9	1673.7	1290.4
72.5°	93.5	93.5	106.4	128.6	209.2	490.5	1265.9	1384.8	1469.0	1379.1	953.1
75°	73.3	72.9	77.4	88.7	112.8	160.8	673.0	764.9	942.2	952.7	542.5
77.5°	58.0	57.6	62.1	67.3	84.2	85.0	214.8	279.7	432.4	407.0	193.8
80°	46.7	46.3	49.6	51.2	61.7	58.8	86.2	99.9	151.5	133.0	83.8
82.5°	42.3	42.3	45.5	39.1	42.7	41.5	53.6	57.2	76.2	79.0	50.4
85°	27.4	28.2	42.7	37.9	27.8	25.4	34.3	36.3	47.6	52.0	24.6
87.5°	12.9	14.1	32.6	31.4	18.5	13.7	19.3	20.6	25.8	31.8	14.5
90°	2.4	2.4	4.0	4.4	2.4	2.4	3.2	2.8	2.8	4.0	4.0
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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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°	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8	368.8
2.5°	368.0	367.1	367.5	368.0	368.4	369.6	370.0	370.0	370.0	369.6	370.4
5°	363.5	362.7	362.7	363.9	365.1	366.7	369.2	371.2	372.0	372.4	372.4
7.5°	358.7	357.9	358.3	360.3	362.3	363.5	365.9	367.1	370.4	370.4	371.2
10°	355.5	356.3	356.7	358.7	360.3	360.3	359.9	359.1	358.3	360.3	359.5
12.5°	353.4	354.7	354.2	356.7	357.5	354.2	349.4	343.0	342.2	343.0	343.8
15°	352.6	352.6	353.8	353.8	349.8	343.4	337.3	337.7	338.5	340.9	340.9
17.5°	352.6	353.0	353.8	351.0	343.8	338.1	336.9	335.7	331.3	330.1	328.9
20°	355.5	354.7	355.5	350.2	343.8	339.3	330.1	321.2	312.7	309.1	307.5
22.5°	362.3	361.1	360.7	355.5	347.4	332.5	314.3	300.6	286.1	281.3	279.7
25°	374.4	374.0	371.2	367.5	345.0	316.0	293.0	271.2	255.5	247.0	247.4
27.5°	395.8	395.8	394.1	378.0	332.5	295.4	264.4	242.2	226.1	218.0	216.8
30°	428.0	428.8	429.6	380.8	312.7	265.2	232.9	218.0	208.4	202.3	201.9
32.5°	467.9	472.3	467.1	377.6	285.7	228.5	208.4	203.1	198.3	194.3	193.8
35°	520.7	532.8	499.7	364.7	255.5	203.5	193.4	189.8	186.2	183.4	183.8
37.5°	591.6	603.3	520.7	343.0	216.8	189.4	185.0	179.3	173.7	167.7	166.8
40°	675.4	671.8	527.9	301.9	192.6	182.6	176.5	169.3	159.6	150.7	149.1
42.5°	759.3	735.1	521.9	251.1	176.9	176.5	168.1	158.8	149.1	141.5	141.5
45°	853.2	790.7	503.4	203.5	164.4	170.1	159.6	149.9	141.1	135.4	135.0
47.5°	941.8	842.7	472.7	169.7	151.9	161.6	153.1	144.3	135.8	131.0	129.8
50°	1045.8	901.9	449.4	146.7	139.8	153.1	149.5	141.5	133.4	127.8	126.9
52.5°	1151.0	959.6	431.6	131.0	129.0	146.7	147.9	143.1	134.6	123.7	122.9
55°	1261.0	1031.7	396.2	118.5	119.3	141.9	149.9	146.3	140.2	122.5	121.7
57.5°	1353.3	1098.2	334.1	110.0	111.6	138.2	150.7	143.9	137.0	123.3	122.1
60°	1425.5	1143.7	245.0	103.2	104.8	134.2	147.1	135.4	126.5	123.3	121.3
62.5°	1447.6	1145.4	162.8	95.1	99.5	127.4	140.7	131.0	120.5	122.1	121.3
65°	1392.0	1084.9	116.5	87.5	95.1	119.3	137.8	126.5	117.7	124.1	123.3
67.5°	1220.7	914.0	93.5	81.4	89.1	110.8	132.6	122.5	115.3	128.6	126.1
70°	951.1	655.7	79.4	75.4	82.6	102.8	125.3	118.1	112.0	124.9	121.7
72.5°	627.1	386.1	70.1	69.7	75.0	95.9	117.3	114.1	106.8	113.2	108.4
75°	327.2	178.9	60.9	63.3	66.5	89.9	110.0	106.8	98.7	101.2	99.5
77.5°	128.6	83.8	52.8	55.6	59.2	81.0	100.8	97.5	90.7	88.7	88.3
80°	70.5	56.4	43.9	47.6	50.0	72.9	91.1	87.5	80.2	79.0	77.8
82.5°	44.7	36.7	36.3	38.7	41.9	64.9	81.8	76.2	70.1	82.6	66.9
85°	21.0	21.8	25.8	29.0	32.6	55.2	71.3	65.3	59.2	57.6	51.2
87.5°	11.7	14.5	16.9	19.7	22.6	38.7	56.4	50.8	44.3	37.9	39.1
90°	2.8	2.8	4.8	4.4	4.8	5.6	27.8	25.0	22.2	10.5	6.9
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



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CATALOG NUMBER: IST-AF-450-LED-E1-T3-7030

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)