

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: P226447

Luminaire Tested: **IST-AF-1200-LED-E1-T3-7060-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226447  
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-T3-7060-ULG  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW  
Light Source: (16) 5700K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8643.7 lumens  
Efficiency: N/A  
Efficacy: 104.5 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 - G2  
  
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

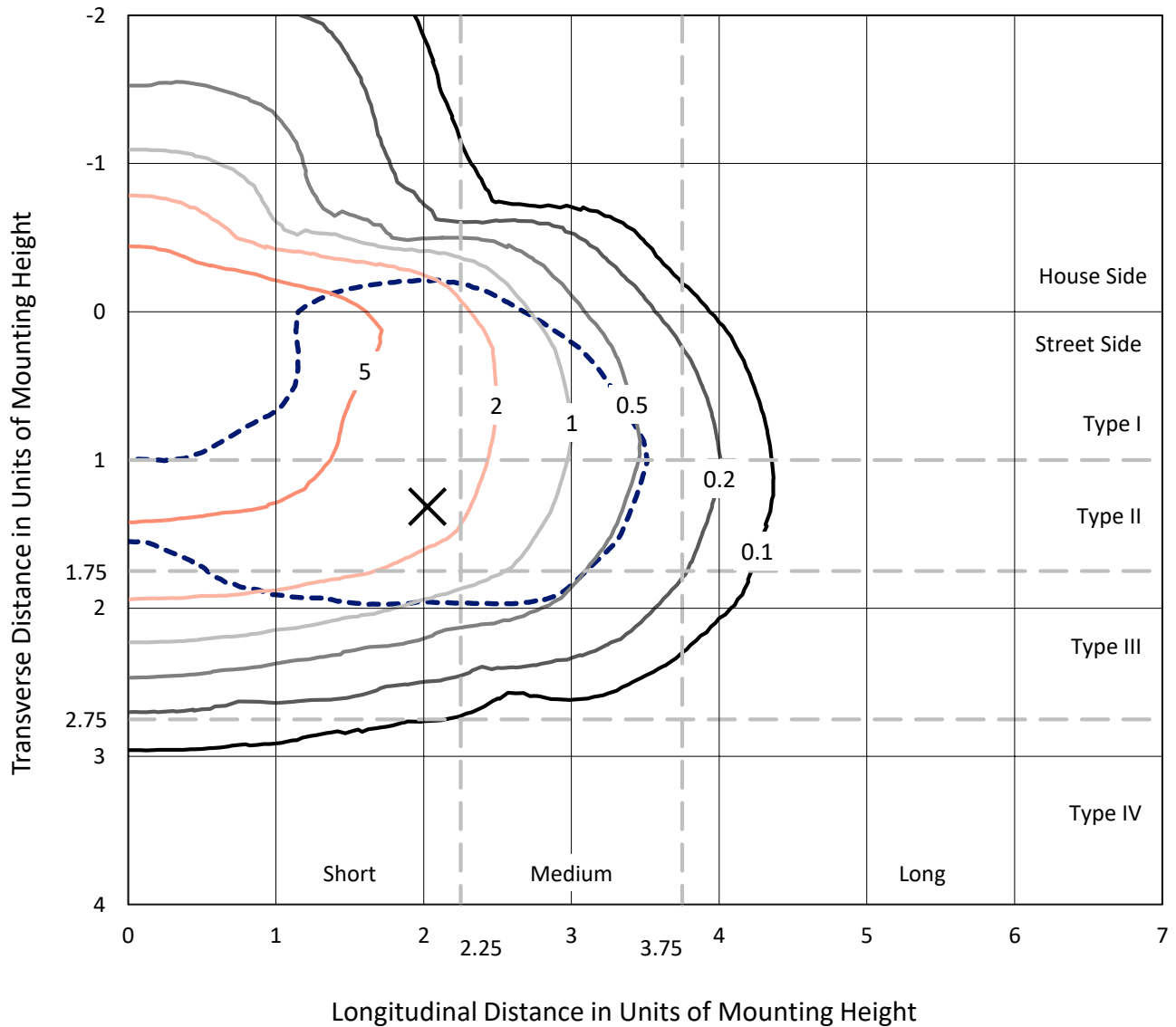


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

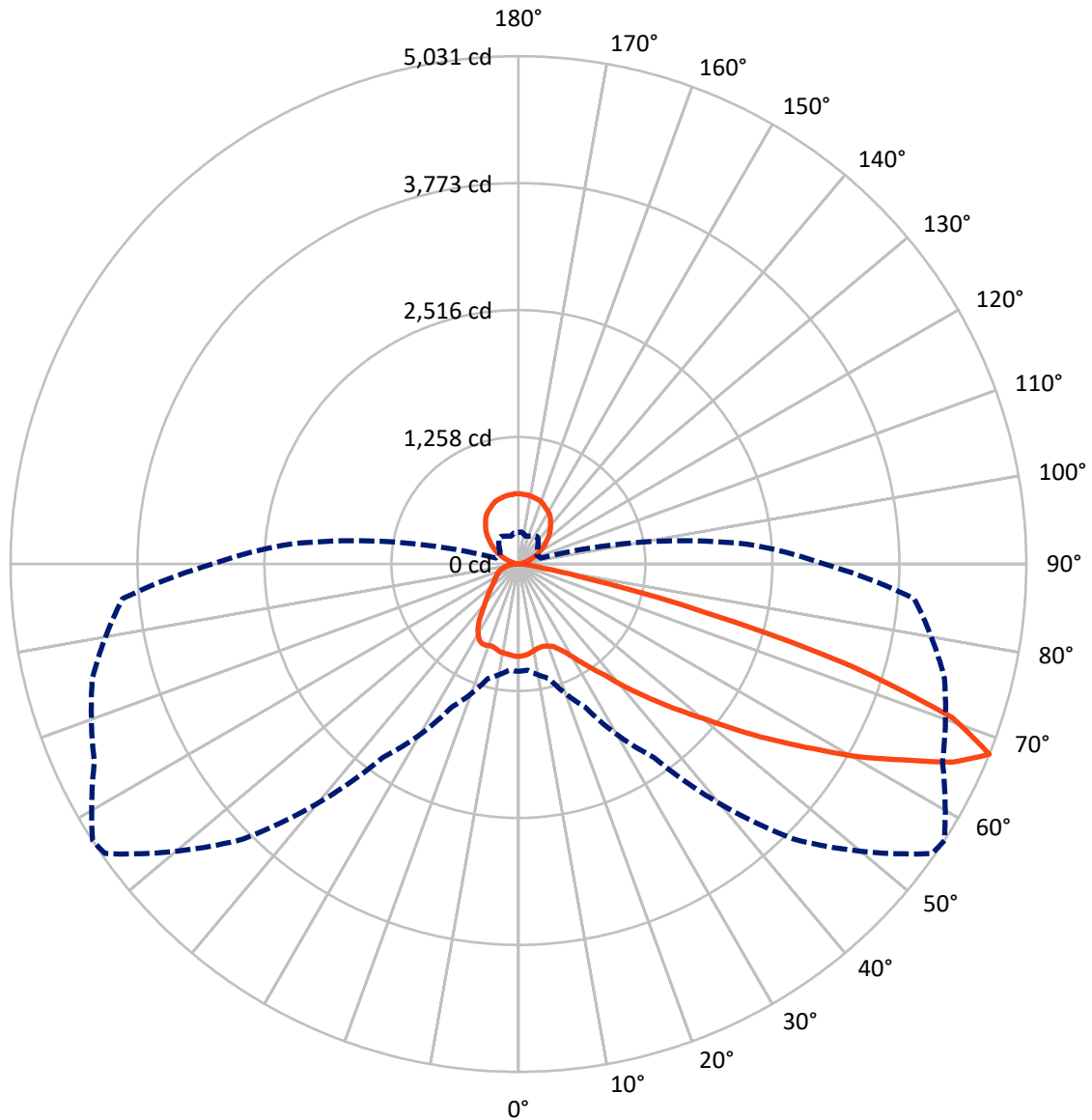


Based on 10 foot mounting height. Maximum calculated value = 9.6 fc  
 Type III - Short - Non-Cutoff

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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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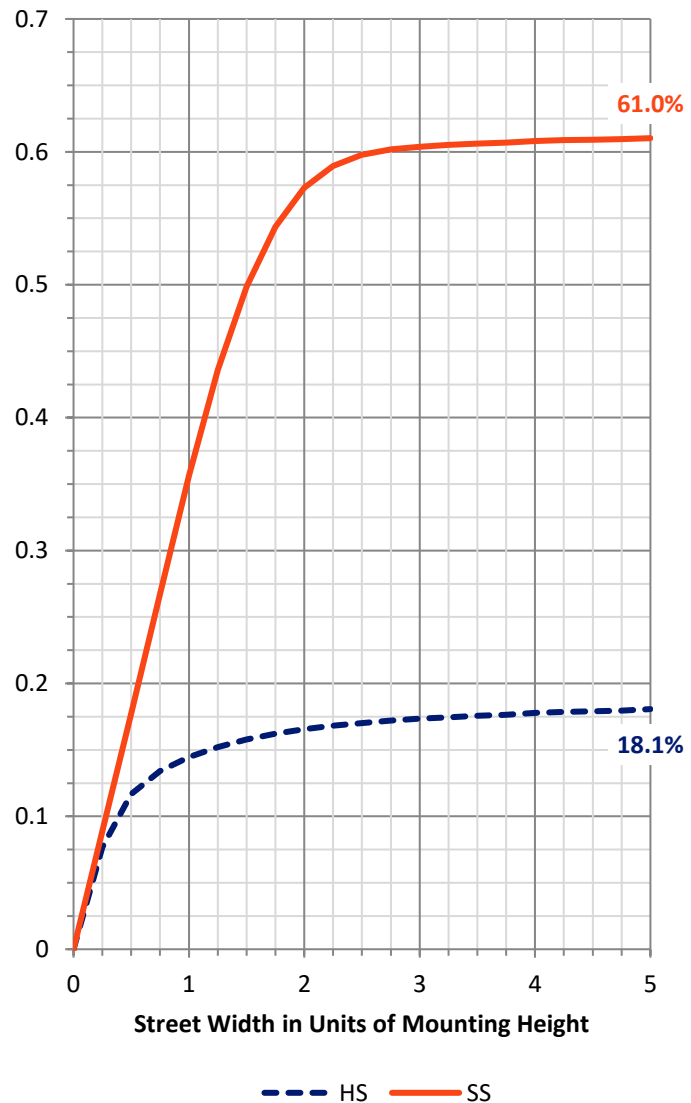
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1608.0	869.6	2477.6
	% Fixture	18.6	10.1	28.7
<b>Street Side</b>	Lumens	5298.0	868.1	6166.1
	% Fixture	61.3	10.0	71.3
<b>Total</b>	Lumens	6906.0	1737.7	8643.7
	% Fixture	79.9	20.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.6	1.0
10°-20°	246.1	2.8
20°-30°	423.5	4.9
30°-40°	688.5	8.0
40°-50°	1110.6	12.8
50°-60°	1655.7	19.2
60°-70°	1864.8	21.6
70°-80°	718.9	8.3
80°-90°	112.4	1.3
90°-100°	11.8	0.1
100°-110°	57.4	0.7
110°-120°	166.1	1.9
120°-130°	273.2	3.2
130°-140°	336.8	3.9
140°-150°	344.6	4.0
150°-160°	290.3	3.4
160°-170°	191.2	2.2
170°-180°	66.3	0.8
0°-90°	6906.0	79.9
0°-180°	8643.7	100.0



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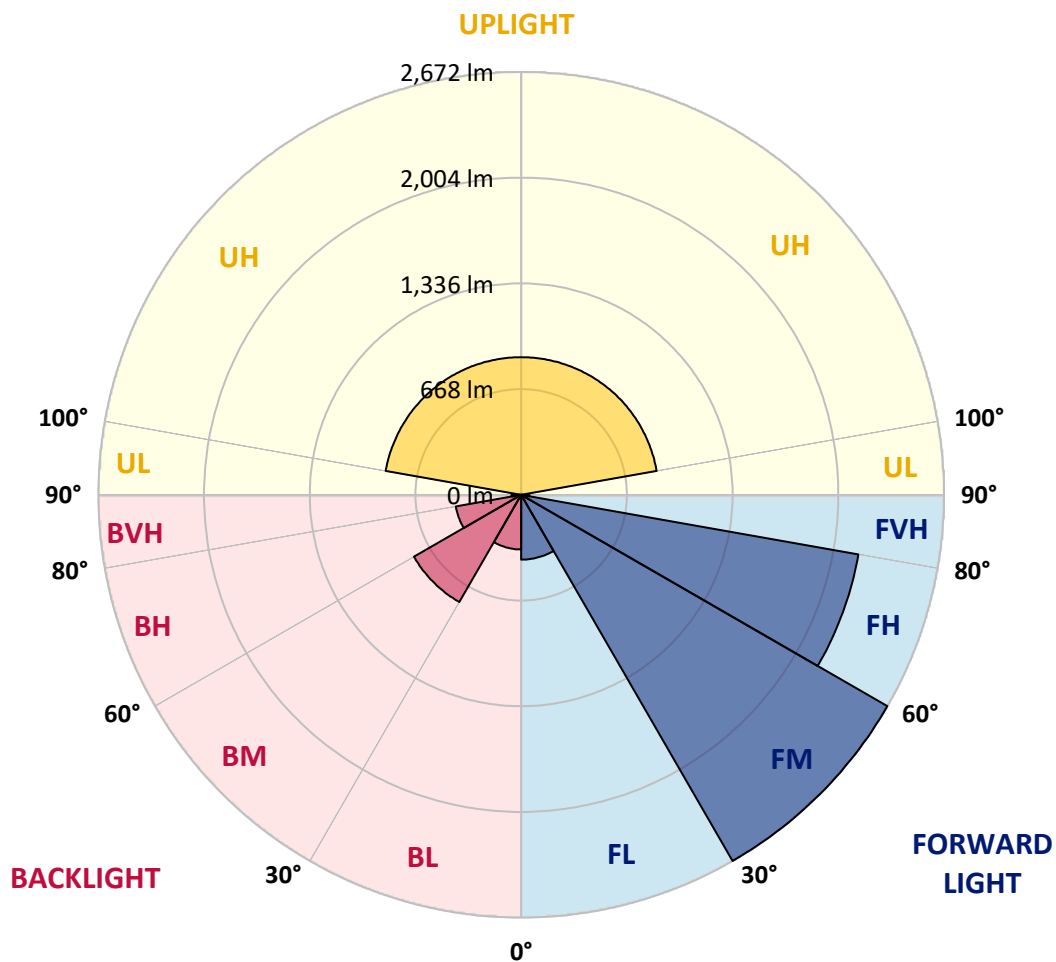
CATALOG NUMBER: IST-AF-1200-LED-E1-T3-7060-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	409.8	4.7			
FM (30°-60°)	2672.4	30.9			
FH (60°-80°)	2164.2	25.0			G2/5000
FVH (80°-90°)	51.6	0.6			G1/100
BL (0°-30°)	345.4	4.0	B1/500		
BM (30°-60°)	782.4	9.1	B1/1000		
BH (60°-80°)	419.4	4.9	B1/500		G1/500
BVH (80°-90°)	60.8	0.7			G1/100
UL (90°-100°)	11.8	0.1		U2/50	
UH (100°-180°)	869.6	10.1		U4/1000	

**BUG Rating: B1-U5-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4
2.5°	908.4	910.4	912.4	911.4	911.4	911.4	911.4	909.4	912.4	912.4	910.4
5°	893.4	894.4	895.4	897.4	899.4	901.4	902.4	902.4	903.4	902.4	900.4
7.5°	871.4	872.4	876.4	876.4	878.4	882.4	884.4	886.4	889.4	889.4	888.4
10°	864.4	864.4	864.4	861.4	863.4	864.4	867.4	867.4	875.4	879.4	881.4
12.5°	872.4	871.4	871.4	863.4	856.4	853.4	856.4	857.4	866.4	872.4	876.4
15°	890.4	890.4	888.4	876.4	862.4	851.4	850.4	850.4	857.4	866.4	873.4
17.5°	932.4	936.4	922.4	903.4	880.4	862.4	855.4	854.4	859.4	866.4	873.4
20°	1012.4	1011.4	990.4	956.4	916.4	886.4	869.4	867.4	866.4	870.4	878.4
22.5°	1107.5	1103.5	1078.5	1035.4	980.4	925.4	892.4	888.4	880.4	883.4	894.4
25°	1209.5	1210.5	1179.5	1123.5	1054.4	988.4	938.4	934.4	917.4	915.4	927.4
27.5°	1311.6	1324.6	1282.5	1229.5	1147.5	1068.4	995.4	989.4	974.4	969.4	981.4
30°	1460.6	1455.6	1403.6	1334.6	1252.5	1153.5	1083.5	1072.5	1042.4	1049.4	1062.4
32.5°	1586.7	1597.7	1550.7	1468.6	1360.6	1256.5	1175.5	1169.5	1140.5	1148.5	1166.5
35°	1740.7	1766.7	1704.7	1603.7	1499.6	1392.6	1295.5	1279.5	1256.5	1272.5	1286.5
37.5°	1916.8	1929.8	1881.8	1751.7	1645.7	1533.6	1423.6	1398.6	1373.6	1406.6	1431.6
40°	2084.9	2105.9	2043.9	1933.8	1810.8	1703.7	1583.7	1578.7	1520.6	1556.7	1621.7
42.5°	2334.0	2360.0	2260.9	2132.9	2021.8	1892.8	1778.7	1751.7	1688.7	1739.7	1848.8
45°	2508.1	2507.1	2440.0	2334.0	2266.0	2140.9	1986.8	1954.8	1886.8	1954.8	2100.9
47.5°	2571.1	2586.1	2563.1	2550.1	2526.1	2435.0	2207.9	2177.9	2113.9	2214.9	2350.0
50°	2664.1	2660.1	2660.1	2740.1	2809.2	2790.2	2467.0	2424.0	2357.0	2478.0	2672.1
52.5°	2688.1	2652.1	2708.1	2861.2	3080.3	3096.3	2768.2	2744.2	2664.1	2782.2	3021.3
55°	2621.1	2612.1	2701.1	2923.2	3268.4	3382.4	3117.3	3084.3	2994.3	3095.3	3398.4
57.5°	2471.0	2494.0	2637.1	2910.2	3398.4	3634.5	3500.5	3453.4	3324.4	3385.4	3772.6
60°	2314.0	2325.0	2514.1	2864.2	3433.4	3809.6	3902.6	3875.6	3654.5	3690.5	4049.7
62.5°	2139.9	2113.9	2310.0	2826.2	3394.4	4050.7	4292.8	4271.8	4010.7	3999.7	4246.8
65°	1653.7	1689.7	1856.8	2336.0	3127.3	4238.8	4758.0	4731.0	4407.8	4254.8	4225.8
67.5°	1062.4	1055.4	1173.5	1561.7	2337.0	3852.6	5001.1	5031.1	4634.9	4369.8	3935.7
70°	381.2	392.2	436.2	709.3	1281.5	2567.1	4408.9	4557.9	4467.9	4154.7	3203.3
72.5°	232.1	232.1	264.1	319.1	519.2	1217.5	3142.3	3437.4	3646.5	3423.4	2366.0
75°	182.1	181.1	192.1	220.1	280.1	399.2	1670.7	1898.8	2339.0	2365.0	1346.6
77.5°	144.1	143.1	154.1	167.1	209.1	211.1	533.2	694.3	1073.5	1010.4	481.2
80°	116.0	115.0	123.1	127.1	153.1	146.1	214.1	248.1	376.2	330.1	208.1
82.5°	105.0	105.0	113.0	97.0	106.0	103.0	133.1	142.1	189.1	196.1	125.1
85°	68.0	70.0	106.0	94.0	69.0	63.0	85.0	90.0	118.0	129.1	61.0
87.5°	32.0	35.0	81.0	78.0	46.0	34.0	48.0	51.0	64.0	79.0	36.0
90°	11.0	11.0	17.0	19.0	14.0	13.0	15.0	14.4	16.0	19.0	17.0
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-T3-7060-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°	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4	915.4
2.5°	913.4	911.4	912.4	913.4	914.4	917.4	918.4	918.4	918.4	917.4	919.4
5°	902.4	900.4	900.4	903.4	906.4	910.4	916.4	921.4	923.4	924.4	924.4
7.5°	890.4	888.4	889.4	894.4	899.4	902.4	908.4	911.4	919.4	919.4	921.4
10°	882.4	884.4	885.4	890.4	894.4	894.4	893.4	891.4	889.4	894.4	892.4
12.5°	877.4	880.4	879.4	885.4	887.4	879.4	867.4	851.4	849.4	851.4	853.4
15°	875.4	875.4	878.4	878.4	868.4	852.4	837.4	838.4	840.4	846.4	846.4
17.5°	875.4	876.4	878.4	871.4	853.4	839.4	836.4	833.3	822.3	819.3	816.3
20°	882.4	880.4	882.4	869.4	853.4	842.4	819.3	797.3	776.3	767.3	763.3
22.5°	899.4	896.4	895.4	882.4	862.4	825.3	780.3	746.3	710.3	698.3	694.3
25°	929.4	928.4	921.4	912.4	856.4	784.3	727.3	673.3	634.3	613.3	614.3
27.5°	982.4	982.4	978.4	938.4	825.3	733.3	656.3	601.3	561.2	541.2	538.2
30°	1062.4	1064.4	1066.4	945.4	776.3	658.3	578.2	541.2	517.2	502.2	501.2
32.5°	1161.5	1172.5	1159.5	937.4	709.3	567.2	517.2	504.2	492.2	482.2	481.2
35°	1292.5	1322.6	1240.5	905.4	634.3	505.2	480.2	471.2	462.2	455.2	456.2
37.5°	1468.6	1497.6	1292.5	851.4	538.2	470.2	459.2	445.2	431.2	416.2	414.2
40°	1676.7	1667.7	1310.5	749.3	478.2	453.2	438.2	420.2	396.2	374.2	370.2
42.5°	1884.8	1824.8	1295.5	623.3	439.2	438.2	417.2	394.2	370.2	351.1	351.1
45°	2117.9	1962.8	1249.5	505.2	408.2	422.2	396.2	372.2	350.1	336.1	335.1
47.5°	2338.0	2091.9	1173.5	421.2	377.2	401.2	380.2	358.2	337.1	325.1	322.1
50°	2596.1	2238.9	1115.5	364.2	347.1	380.2	371.2	351.1	331.1	317.1	315.1
52.5°	2857.2	2382.0	1071.4	325.1	320.1	364.2	367.2	355.1	334.1	307.1	305.1
55°	3130.3	2561.1	983.4	294.1	296.1	352.1	372.2	363.2	348.1	304.1	302.1
57.5°	3359.4	2726.1	829.3	273.1	277.1	343.1	374.2	357.1	340.1	306.1	303.1
60°	3538.5	2839.2	608.3	256.1	260.1	333.1	365.2	336.1	314.1	306.1	301.1
62.5°	3593.5	2843.2	404.2	236.1	247.1	316.1	349.1	325.1	299.1	303.1	301.1
65°	3455.5	2693.1	289.1	217.1	236.1	296.1	342.1	314.1	292.1	308.1	306.1
67.5°	3030.3	2269.0	232.1	202.1	221.1	275.1	329.1	304.1	286.1	319.1	313.1
70°	2361.0	1627.7	197.1	187.1	205.1	255.1	311.1	293.1	278.1	310.1	302.1
72.5°	1556.7	958.4	174.1	173.1	186.1	238.1	291.1	283.1	265.1	281.1	269.1
75°	812.3	444.2	151.1	157.1	165.1	223.1	273.1	265.1	245.1	251.1	247.1
77.5°	319.1	208.1	131.1	138.1	147.1	201.1	250.1	242.1	225.1	220.1	219.1
80°	175.1	140.1	109.0	118.0	124.1	181.1	226.1	217.1	199.1	196.1	193.1
82.5°	111.0	91.0	90.0	96.0	104.0	161.1	203.1	189.1	174.1	205.1	166.1
85°	52.0	54.0	64.0	72.0	81.0	137.1	177.1	162.1	147.1	143.1	127.1
87.5°	29.0	36.0	42.0	49.0	56.0	96.0	140.1	126.1	110.0	94.0	97.0
90°	14.0	14.0	21.0	20.0	19.0	21.0	77.0	70.0	62.0	31.0	22.0
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)