

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: STREETWORKS

Report Number: P198489

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-7030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198489  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-5MQ-7030-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12471 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

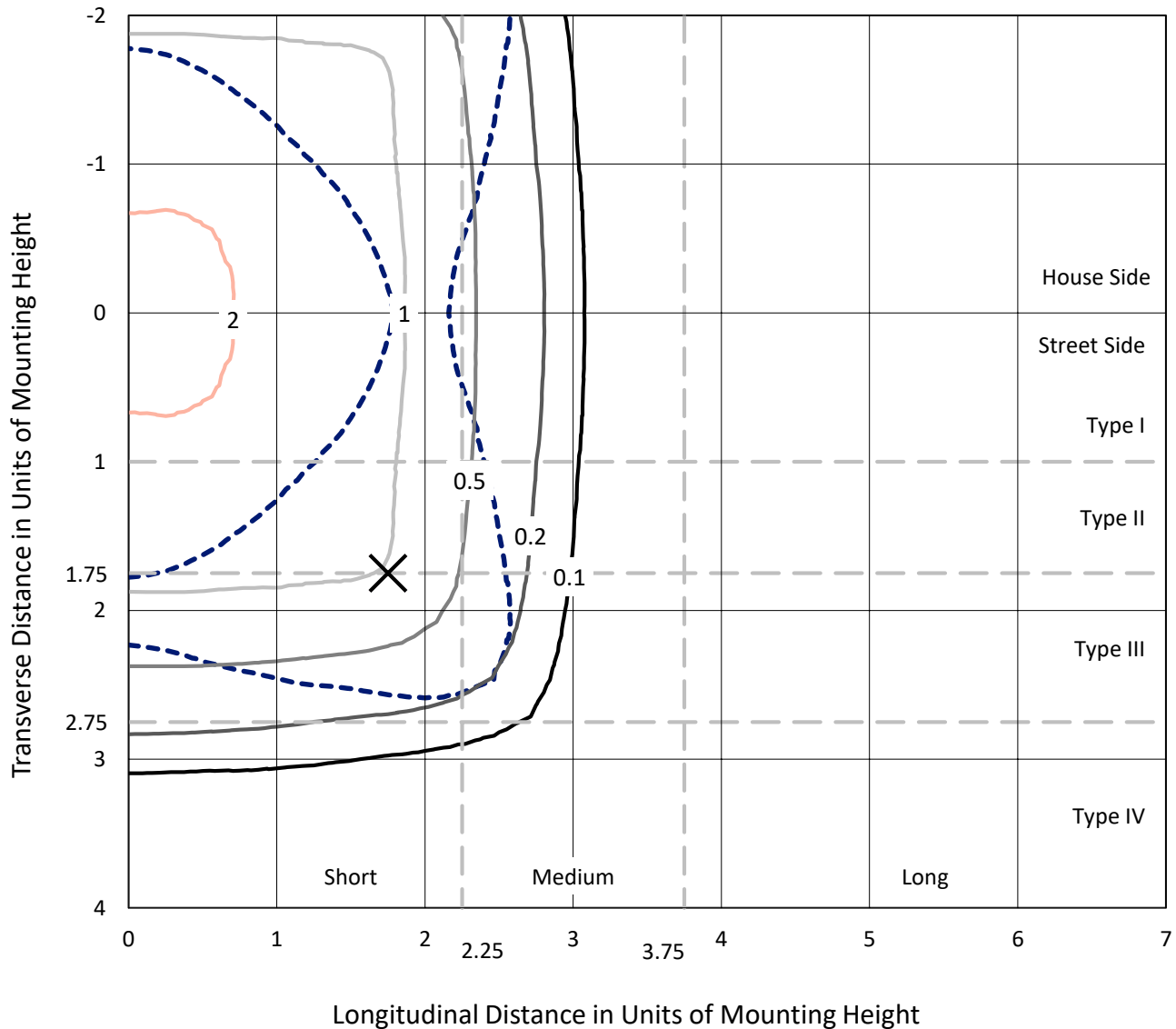
Input Watts (W): 128  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

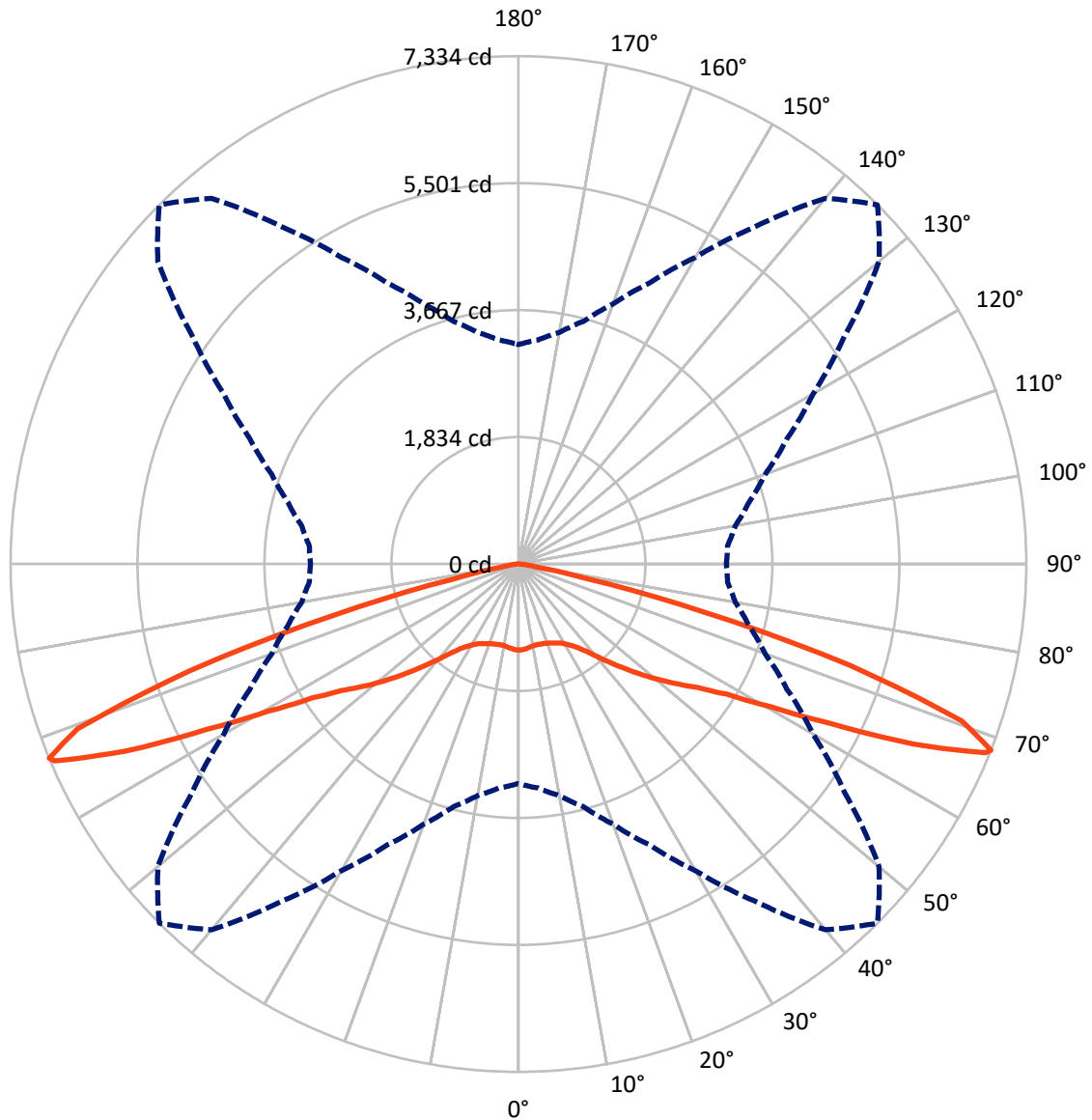


Based on 20 foot mounting height. Maximum calculated value = 3.1 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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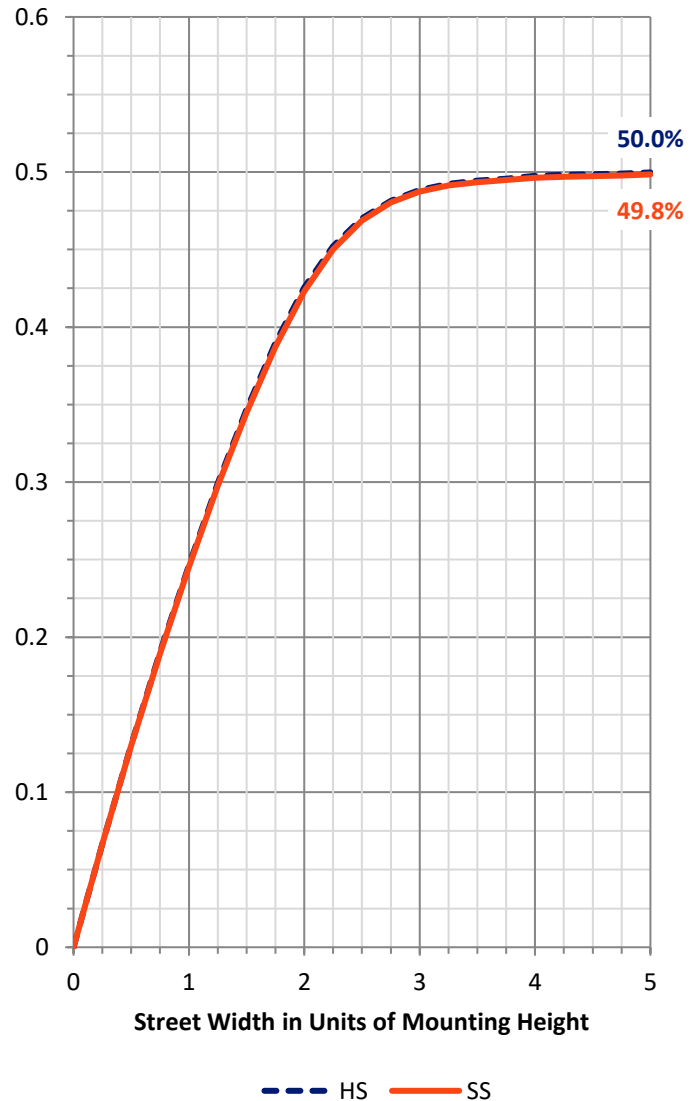
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6235.5	0.0	6235.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6235.5	0.0	6235.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12471.0	0.0	12471.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.4	0.9
10°-20°	337.6	2.7
20°-30°	574.0	4.6
30°-40°	939.3	7.5
40°-50°	1678.6	13.5
50°-60°	2834.9	22.7
60°-70°	4395.9	35.2
70°-80°	1511.4	12.1
80°-90°	83.1	0.7
90°-100°	0.0	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°	12471.0	100.0
0°-180°	12471.0	100.0



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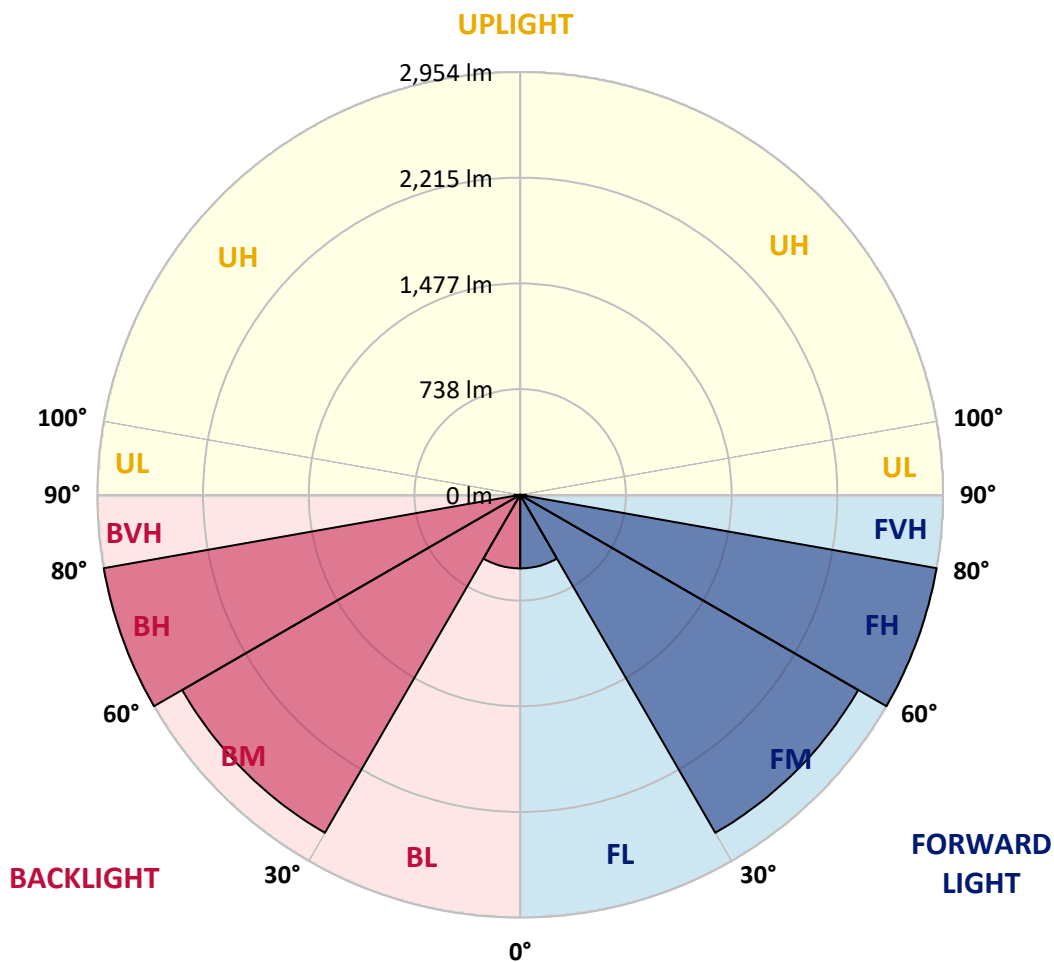
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	514.0	4.1			
FM (30°-60°)	2726.4	21.9			
FH (60°-80°)	2953.6	23.7			G2/5000
FVH (80°-90°)	41.5	0.3			G1/100
BL (0°-30°)	514.0	4.1	B2/1000		
BM (30°-60°)	2726.4	21.9	B3/5000		
BH (60°-80°)	2953.6	23.7	B4/5000		G2/5000
BVH (80°-90°)	41.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0
2.5°	1249.4	1249.4	1250.9	1250.1	1247.8	1245.5	1243.3	1241.0	1239.4	1237.9	1236.4
5°	1236.4	1236.4	1238.7	1237.1	1235.6	1233.3	1231.8	1229.5	1228.0	1226.5	1227.2
7.5°	1219.6	1221.1	1222.6	1221.9	1218.8	1218.1	1215.8	1215.0	1213.5	1211.2	1211.9
10°	1205.1	1205.8	1207.4	1206.6	1205.8	1203.5	1202.8	1202.0	1201.3	1198.2	1197.4
12.5°	1190.6	1192.1	1193.6	1194.4	1193.6	1194.4	1195.1	1195.9	1195.1	1193.6	1193.6
15°	1179.1	1180.6	1182.9	1185.2	1186.0	1190.6	1193.6	1196.7	1199.0	1199.7	1197.4
17.5°	1173.0	1175.3	1178.3	1182.9	1186.7	1192.1	1197.4	1202.0	1205.8	1206.6	1204.3
20°	1172.2	1174.5	1179.1	1184.5	1191.3	1198.2	1206.6	1213.5	1217.3	1219.6	1217.3
22.5°	1177.6	1180.6	1186.7	1193.6	1202.0	1211.2	1221.9	1229.5	1237.1	1240.2	1237.9
25°	1192.9	1195.9	1202.8	1211.2	1220.3	1231.8	1242.5	1252.4	1260.1	1263.9	1260.8
27.5°	1224.9	1225.7	1233.3	1242.5	1253.2	1263.1	1276.9	1281.4	1287.5	1291.4	1287.5
30°	1270.0	1271.5	1278.4	1292.9	1302.8	1315.8	1323.4	1328.0	1334.9	1338.7	1334.1
32.5°	1338.7	1340.2	1346.4	1360.1	1369.3	1379.2	1388.4	1391.4	1398.3	1402.9	1397.5
35°	1435.7	1438.8	1444.1	1453.3	1460.9	1468.5	1475.4	1473.1	1477.7	1483.8	1478.5
37.5°	1568.6	1567.8	1569.3	1576.2	1583.9	1588.4	1599.1	1593.8	1598.4	1603.7	1600.7
40°	1723.6	1723.6	1722.8	1735.1	1738.1	1742.7	1754.2	1747.3	1753.4	1759.5	1754.2
42.5°	1900.0	1903.1	1906.9	1916.8	1925.2	1926.7	1932.1	1929.0	1936.7	1942.0	1936.7
45°	2103.1	2107.7	2112.3	2135.2	2139.0	2142.1	2145.9	2136.0	2144.4	2149.0	2147.4
47.5°	2313.9	2322.3	2332.2	2355.9	2371.2	2378.1	2381.1	2369.7	2370.4	2377.3	2378.1
50°	2552.2	2561.4	2571.3	2598.0	2612.5	2624.7	2628.6	2615.6	2617.1	2622.4	2624.0
52.5°	2772.1	2782.8	2804.2	2840.1	2860.7	2882.1	2883.6	2867.6	2874.5	2878.3	2875.2
55°	2979.1	2992.8	3021.1	3069.2	3106.6	3148.6	3167.7	3150.1	3150.1	3147.1	3145.6
57.5°	3220.4	3235.7	3264.7	3320.4	3372.4	3432.7	3484.6	3502.2	3534.3	3545.0	3528.2
60°	3583.9	3599.9	3629.7	3703.0	3768.7	3856.5	3942.1	4011.6	4124.6	4185.7	4130.7
62.5°	3916.1	3940.5	4010.8	4139.1	4281.1	4443.8	4632.4	4766.8	4972.3	5074.6	4936.4
65°	3840.5	3890.1	4027.6	4229.2	4522.5	4875.3	5259.4	5628.3	6052.9	6270.5	5989.5
67.5°	3354.8	3396.8	3545.0	3779.4	4145.2	4631.7	5228.9	5992.5	6868.5	7276.3	6779.1
68°	3169.2	3247.9	3395.3	3628.2	3997.1	4475.1	5112.8	5937.5	6893.7	7334.3	6797.4
70°	2430.0	2458.3	2599.5	2808.8	3206.7	3675.5	4319.3	5259.4	6340.0	6793.6	6241.5
72.5°	1154.7	1171.5	1263.1	1469.3	1722.1	2103.9	2672.1	3558.7	4532.4	5004.3	4453.7
75°	423.1	426.9	448.3	497.1	591.8	735.4	1008.0	1559.4	2308.6	2753.0	2317.7
77.5°	228.3	229.1	237.5	249.7	266.5	285.6	326.9	438.3	707.2	962.2	746.9
80°	143.6	142.8	151.2	161.1	172.6	181.8	185.6	198.6	223.8	261.9	240.6
82.5°	73.3	80.2	99.3	110.0	126.8	129.8	126.0	125.2	132.9	143.6	148.2
85°	40.5	35.9	52.7	70.3	76.4	78.7	79.4	74.8	73.3	71.8	75.6
87.5°	20.6	19.1	22.9	35.1	37.4	30.5	31.3	26.7	18.3	18.3	19.1
90°	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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0
2.5°	1234.9	1235.6	1234.1	1234.1	1234.1	1234.9	1234.1	1233.3
5°	1224.9	1226.5	1226.5	1227.2	1228.0	1228.0	1228.0	1228.0
7.5°	1210.4	1211.2	1212.7	1212.7	1212.7	1212.7	1212.7	1212.7
10°	1196.7	1195.1	1194.4	1192.9	1192.9	1190.6	1191.3	1192.1
12.5°	1189.8	1186.7	1185.2	1182.9	1181.4	1179.1	1179.1	1179.9
15°	1192.9	1188.3	1183.7	1182.2	1180.6	1179.1	1177.6	1178.3
17.5°	1199.0	1193.6	1188.3	1185.2	1182.2	1179.9	1179.1	1179.9
20°	1211.9	1204.3	1195.9	1190.6	1184.5	1182.9	1180.6	1182.9
22.5°	1229.5	1220.3	1209.7	1199.7	1192.9	1189.8	1186.7	1189.0
25°	1250.9	1241.0	1230.3	1218.8	1211.2	1208.9	1205.1	1205.1
27.5°	1280.7	1272.3	1263.1	1252.4	1244.8	1242.5	1236.4	1236.4
30°	1328.0	1319.6	1311.2	1302.1	1294.4	1292.1	1284.5	1284.5
32.5°	1390.6	1381.5	1376.1	1368.5	1362.4	1358.6	1349.4	1348.6
35°	1474.6	1466.2	1465.5	1460.1	1454.0	1454.8	1445.6	1444.1
37.5°	1595.3	1588.4	1590.7	1586.1	1580.8	1585.4	1580.0	1580.0
40°	1749.6	1747.3	1749.6	1746.5	1747.3	1748.0	1743.5	1745.0
42.5°	1935.9	1929.8	1943.5	1942.0	1939.7	1945.8	1935.1	1927.5
45°	2150.5	2148.2	2162.0	2164.2	2159.7	2163.5	2144.4	2143.6
47.5°	2383.4	2383.4	2395.6	2394.1	2389.5	2390.3	2367.4	2352.9
50°	2626.3	2624.7	2637.0	2633.9	2627.8	2627.0	2603.4	2588.8
52.5°	2879.0	2879.0	2896.6	2888.2	2873.7	2866.8	2837.8	2818.7
55°	3158.5	3154.7	3160.1	3132.6	3104.3	3083.7	3047.8	3033.3
57.5°	3512.1	3467.8	3429.6	3394.5	3354.8	3330.4	3288.4	3273.1
60°	4013.9	3895.5	3844.3	3774.1	3708.4	3675.5	3619.8	3590.0
62.5°	4708.8	4512.5	4373.5	4218.5	4068.8	3963.5	3878.7	3841.3
65°	5512.2	5084.5	4730.9	4398.7	4116.9	3893.2	3768.7	3729.8
67.5°	5817.6	5032.6	4422.4	3945.9	3603.8	3337.2	3188.3	3157.0
68°	5752.7	4913.5	4279.6	3791.6	3448.0	3179.2	3031.0	3002.8
70°	5074.6	4145.2	3476.2	2990.5	2669.8	2414.0	2309.3	2264.3
72.5°	3459.4	2662.2	2042.1	1633.5	1393.7	1231.8	1135.6	1102.7
75°	1592.3	1076.0	718.6	536.9	455.9	417.0	387.2	379.5
77.5°	464.3	337.5	290.2	268.8	252.8	239.0	229.1	228.3
80°	220.7	207.0	200.8	187.1	172.6	159.6	150.4	152.0
82.5°	148.2	144.3	144.3	130.6	107.7	92.4	76.4	68.7
85°	78.7	81.7	86.3	81.7	71.0	52.7	34.4	37.4
87.5°	26.7	30.5	32.1	31.3	28.3	21.4	16.0	16.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)