

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: LUMARK

Report Number: P960508

Luminaire Tested: **NAV-SB1C-830-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960508
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7027.4 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

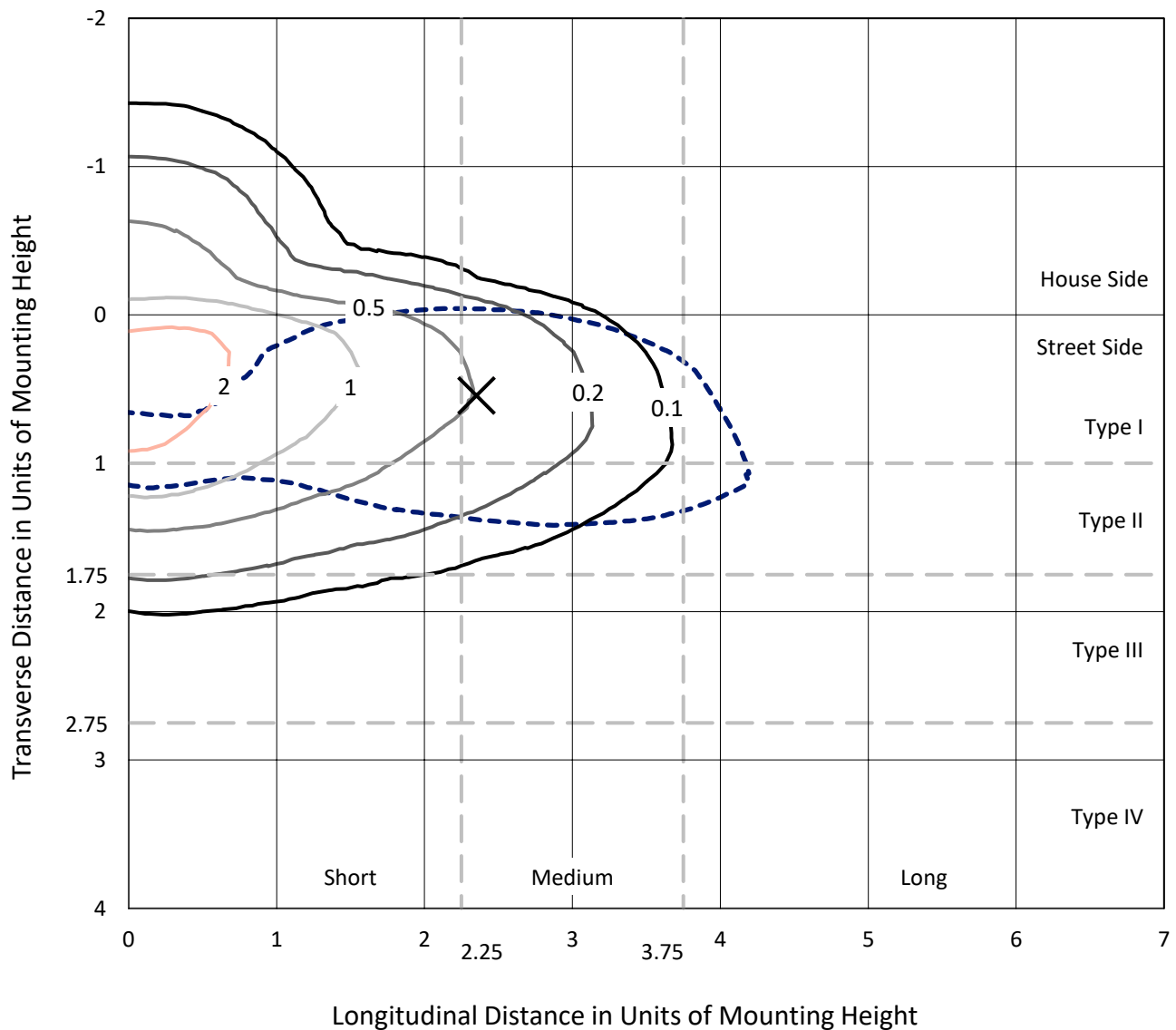
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

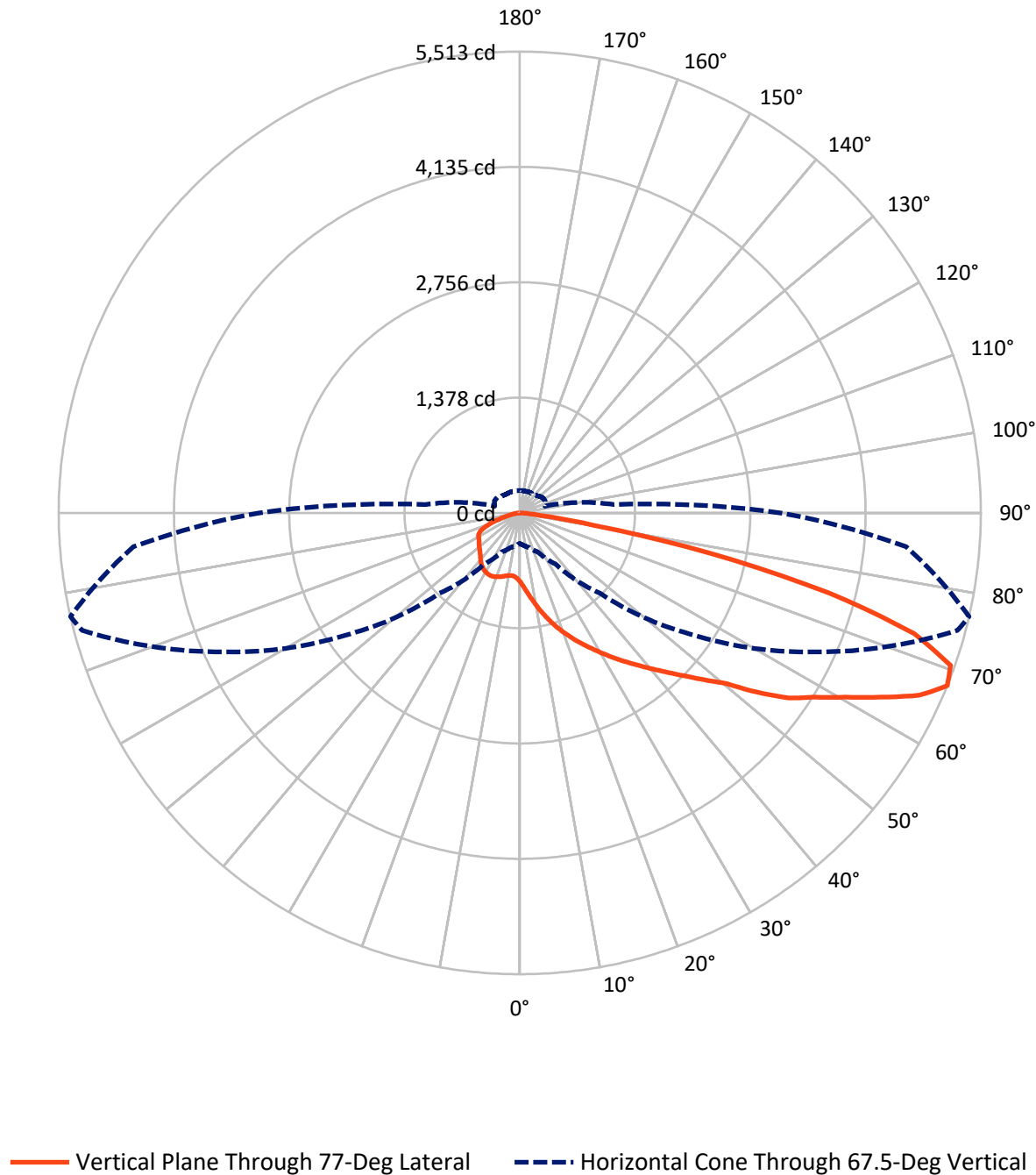
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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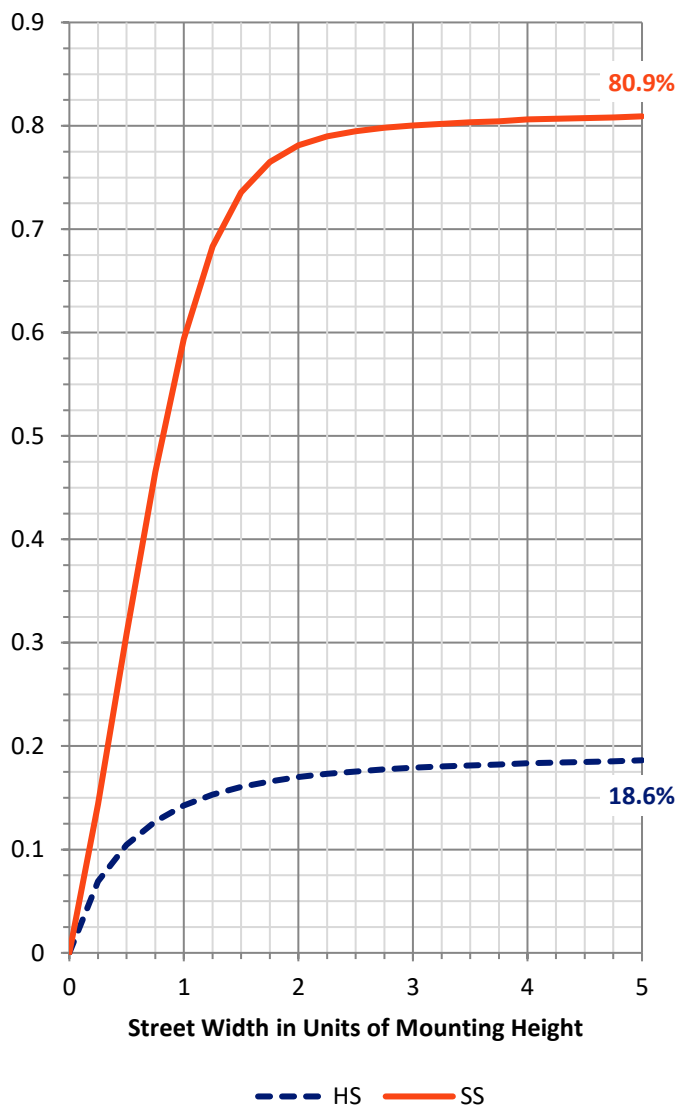
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1329.3	0.0	1329.3
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	5698.1	0.0	5698.1
	% Fixture	81.1	0.0	81.1
Total	Lumens	7027.4	0.0	7027.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.4	1.3
10°-20°	317.5	4.5
20°-30°	599.5	8.5
30°-40°	965.8	13.7
40°-50°	1321.0	18.8
50°-60°	1490.1	21.2
60°-70°	1390.8	19.8
70°-80°	762.4	10.8
80°-90°	92.0	1.3
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°	7027.4	100.0
0°-180°	7027.4	100.0

Coefficient of Utilization



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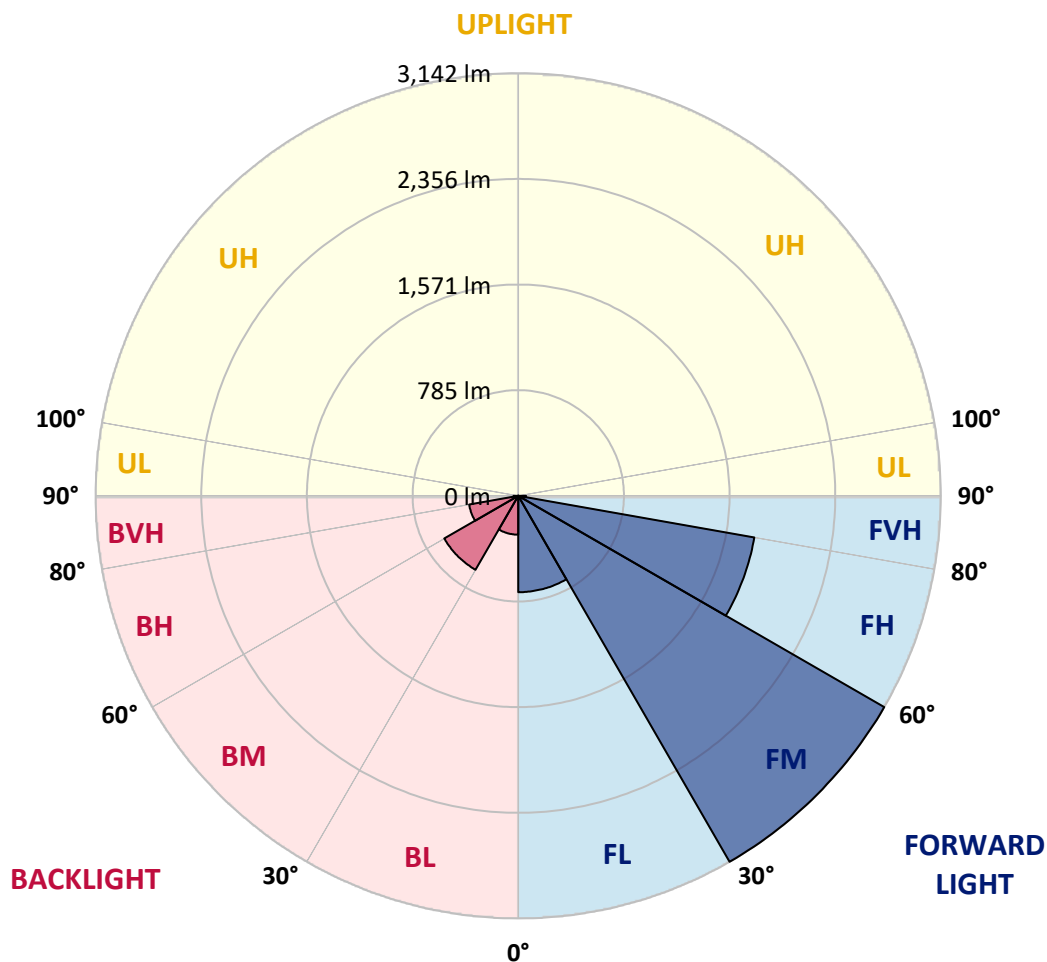
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	716.4	10.2			
FM	(30°-60°)	3141.9	44.7			
FH	(60°-80°)	1782.4	25.4			G1/1800
FVH	(80°-90°)	57.5	0.8			G1/100
BL	(0°-30°)	289.0	4.1	B1/500		
BM	(30°-60°)	635.0	9.0	B1/1000		
BH	(60°-80°)	370.8	5.3	B1/500		G1/500
BVH	(80°-90°)	34.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5
2.5°	1032.4	1039.7	1030.5	1030.5	1000.1	984.1	953.7	930.5	888.8	881.5	853.9
5°	1220.3	1229.4	1216.7	1211.2	1175.3	1142.3	1091.1	1040.7	966.4	958.8	893.8
7.5°	1365.7	1377.4	1366.1	1360.3	1328.4	1291.4	1231.5	1161.1	1056.4	1041.5	947.5
10°	1484.4	1486.1	1482.6	1484.7	1459.7	1429.3	1368.0	1286.0	1155.0	1134.7	1012.4
12.5°	1551.4	1559.8	1567.1	1580.1	1575.8	1557.0	1501.8	1403.8	1259.5	1233.4	1083.2
15°	1583.0	1597.6	1613.9	1644.0	1668.3	1673.0	1630.9	1530.4	1365.7	1334.2	1154.7
17.5°	1594.3	1608.1	1633.8	1677.3	1729.6	1764.7	1745.9	1653.4	1471.0	1434.7	1229.7
20°	1651.3	1655.3	1670.9	1712.2	1768.7	1827.2	1841.3	1771.7	1575.0	1534.1	1307.4
22.5°	1773.1	1765.2	1769.5	1788.3	1829.0	1885.6	1917.9	1876.2	1682.0	1634.9	1385.7
25°	1974.5	1951.2	1928.0	1906.3	1926.9	1958.9	1995.5	1980.6	1794.2	1734.3	1464.8
27.5°	2228.8	2200.5	2149.3	2077.9	2052.8	2064.0	2080.3	2077.5	1897.9	1837.3	1546.4
30°	2479.1	2446.1	2385.1	2281.8	2215.6	2185.9	2173.6	2165.2	2010.7	1946.2	1628.7
32.5°	2678.9	2652.8	2592.9	2477.2	2381.5	2330.6	2289.6	2259.9	2128.6	2064.0	1715.8
35°	2853.8	2829.4	2760.9	2634.7	2530.5	2476.5	2422.8	2359.3	2251.2	2185.9	1809.4
37.5°	3013.4	2989.1	2895.1	2763.8	2659.0	2621.6	2573.7	2465.9	2374.2	2312.5	1908.4
40°	3114.3	3108.7	3021.0	2872.3	2763.4	2745.0	2729.0	2589.7	2510.6	2453.2	2017.3
42.5°	3140.0	3152.0	3082.3	2960.0	2856.3	2841.4	2878.8	2729.7	2663.7	2608.9	2140.6
45°	3078.0	3112.4	3066.7	2983.7	2922.3	2914.4	3011.6	2882.8	2833.1	2783.0	2289.3
47.5°	2920.8	2979.3	2960.4	2948.8	2940.1	2974.5	3128.4	3045.3	3025.0	2981.4	2459.1
50°	2603.8	2714.5	2747.5	2820.8	2905.0	3021.4	3234.7	3222.7	3249.1	3205.3	2665.8
52.5°	2055.7	2208.1	2399.6	2583.1	2796.8	3005.7	3351.4	3477.3	3589.0	3565.2	2994.5
55°	1697.0	1765.5	1912.8	2249.5	2587.1	2940.1	3404.0	3683.0	3926.4	3905.0	3243.7
57.5°	1421.3	1482.6	1573.3	1854.4	2270.1	2791.0	3436.7	3808.5	4157.5	4155.3	3489.6
60°	1125.7	1190.5	1283.4	1482.6	1899.7	2533.5	3429.4	3951.5	4452.4	4470.5	3789.6
62.5°	791.9	863.4	966.4	1152.1	1521.4	2199.8	3281.4	4054.8	4799.6	4848.9	4150.6
65°	520.6	567.7	645.3	805.6	1133.5	1770.6	2998.8	4068.2	5171.0	5254.5	4489.4
67.5°	364.9	383.0	428.8	515.9	747.2	1357.8	2548.7	3929.3	5418.8	5512.8	4636.3
70°	284.7	293.9	317.0	351.9	469.4	913.1	1953.0	3568.0	5365.8	5463.8	4482.8
72.5°	245.9	254.6	263.3	267.7	314.9	563.8	1323.0	2983.3	4867.0	4933.4	3897.8
75°	223.1	225.3	232.6	231.0	240.2	365.6	763.6	2173.6	3840.1	3817.2	2877.4
77.5°	187.6	190.4	202.4	200.6	213.3	249.9	396.5	1402.7	2489.5	2334.3	1601.6
80°	158.9	160.3	173.4	171.2	185.3	181.0	202.4	714.9	1056.0	894.5	461.8
82.5°	55.1	68.2	132.4	136.4	141.4	109.6	116.8	291.6	322.5	247.0	96.9
85°	26.9	28.7	67.4	95.7	95.4	55.1	57.0	104.1	101.6	79.8	32.3
87.5°	4.3	5.4	8.0	37.4	29.7	14.6	19.6	20.3	21.0	18.1	7.3
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5	824.5
2.5°	833.6	815.5	777.4	742.2	714.6	688.2	673.2	660.6	653.3	651.9	651.9
5°	856.1	818.8	749.5	691.1	652.9	624.6	609.8	600.3	595.6	592.8	592.3
7.5°	888.4	833.6	734.9	668.5	628.6	608.3	600.8	599.2	598.9	599.2	600.3
10°	933.0	857.9	733.5	663.1	629.8	618.5	618.2	618.5	619.9	620.3	620.6
12.5°	981.2	882.9	739.3	667.8	643.5	637.3	636.2	635.9	637.0	637.8	638.1
15°	1033.8	915.9	749.1	677.9	658.8	652.2	651.2	648.9	648.6	648.2	647.9
17.5°	1087.9	948.6	759.9	688.9	668.5	659.5	655.5	650.4	646.5	645.3	646.5
20°	1142.7	980.9	767.6	694.3	669.3	656.6	648.6	639.9	633.0	629.0	630.5
22.5°	1201.1	1014.6	772.3	692.9	662.8	645.3	630.8	620.6	610.2	603.2	603.6
25°	1258.0	1044.0	771.9	685.2	650.1	627.9	609.5	596.3	581.9	574.6	574.6
27.5°	1312.8	1070.5	762.9	671.8	631.9	607.2	585.1	569.5	555.3	548.5	548.1
30°	1369.4	1092.6	748.8	652.2	610.5	583.3	559.0	545.6	532.9	526.3	526.0
32.5°	1425.6	1112.9	728.8	627.9	585.9	559.8	535.8	523.5	515.9	515.9	516.2
35°	1485.1	1127.1	702.3	599.6	559.8	534.7	515.9	508.6	507.9	503.5	502.5
37.5°	1547.9	1136.1	670.0	570.6	533.9	510.3	504.6	495.9	488.6	479.2	477.8
40°	1613.9	1145.2	631.2	540.5	506.8	493.7	491.2	479.6	458.9	435.6	432.4
42.5°	1694.0	1151.4	590.9	510.3	478.1	473.8	477.3	457.5	424.5	407.0	407.3
45°	1786.9	1161.5	553.9	480.6	448.7	448.7	463.9	437.9	410.6	399.7	401.6
47.5°	1907.3	1185.1	519.5	448.0	421.5	428.8	434.2	414.3	399.0	385.6	385.2
50°	2081.5	1241.7	483.9	415.0	400.9	415.3	407.7	396.2	378.3	367.5	366.3
52.5°	2297.6	1275.1	452.3	385.2	383.0	397.6	386.7	375.8	362.3	347.9	345.0
55°	2444.9	1281.2	425.9	363.5	371.0	369.6	365.6	355.9	348.6	329.3	329.7
57.5°	2609.6	1293.6	404.1	350.4	363.5	347.5	346.0	337.7	328.3	315.2	310.9
60°	2806.6	1312.8	385.2	345.3	356.9	333.0	325.7	322.5	313.0	306.5	308.3
62.5°	3021.4	1330.2	366.0	346.0	349.3	318.9	308.0	306.9	301.0	298.9	298.9
65°	3167.9	1282.7	342.0	345.3	337.3	304.3	290.6	290.2	285.5	284.7	284.4
67.5°	3116.7	1132.1	309.8	335.2	325.0	289.9	274.6	273.2	267.0	267.3	267.3
70°	2860.7	917.4	265.2	310.2	309.8	276.8	257.9	253.2	244.9	246.3	247.7
72.5°	2380.4	679.8	205.3	268.4	285.5	264.8	238.7	231.0	220.6	222.0	221.6
75°	1719.0	462.2	149.4	204.2	248.5	250.6	219.9	206.7	194.0	196.3	197.0
77.5°	879.7	261.9	109.9	140.7	195.2	227.9	202.7	185.3	182.4	202.7	199.9
80°	286.9	131.3	76.2	98.7	128.0	186.4	177.7	157.7	157.0	161.7	138.9
82.5°	85.6	55.5	49.0	64.9	70.7	142.9	153.4	119.3	102.7	108.1	111.7
85°	29.4	26.9	28.0	32.3	33.7	83.8	107.4	79.1	74.7	82.3	81.3
87.5°	6.9	9.4	8.0	7.3	7.3	20.3	41.7	33.0	45.7	30.4	29.4
90°	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)