

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: P964171

Luminaire Tested: **NAV-SB3B-827-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-827-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

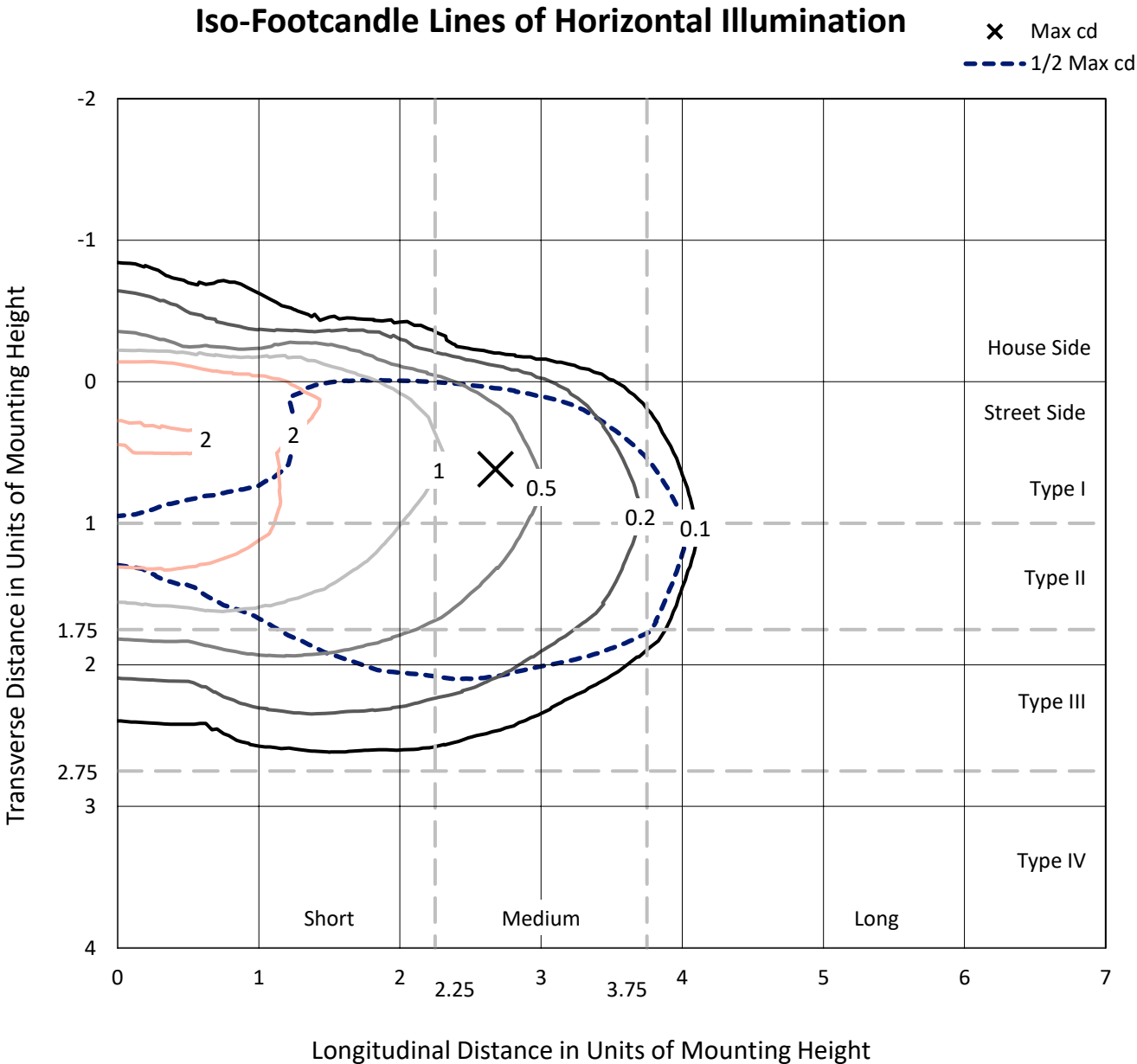
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12536.8 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
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



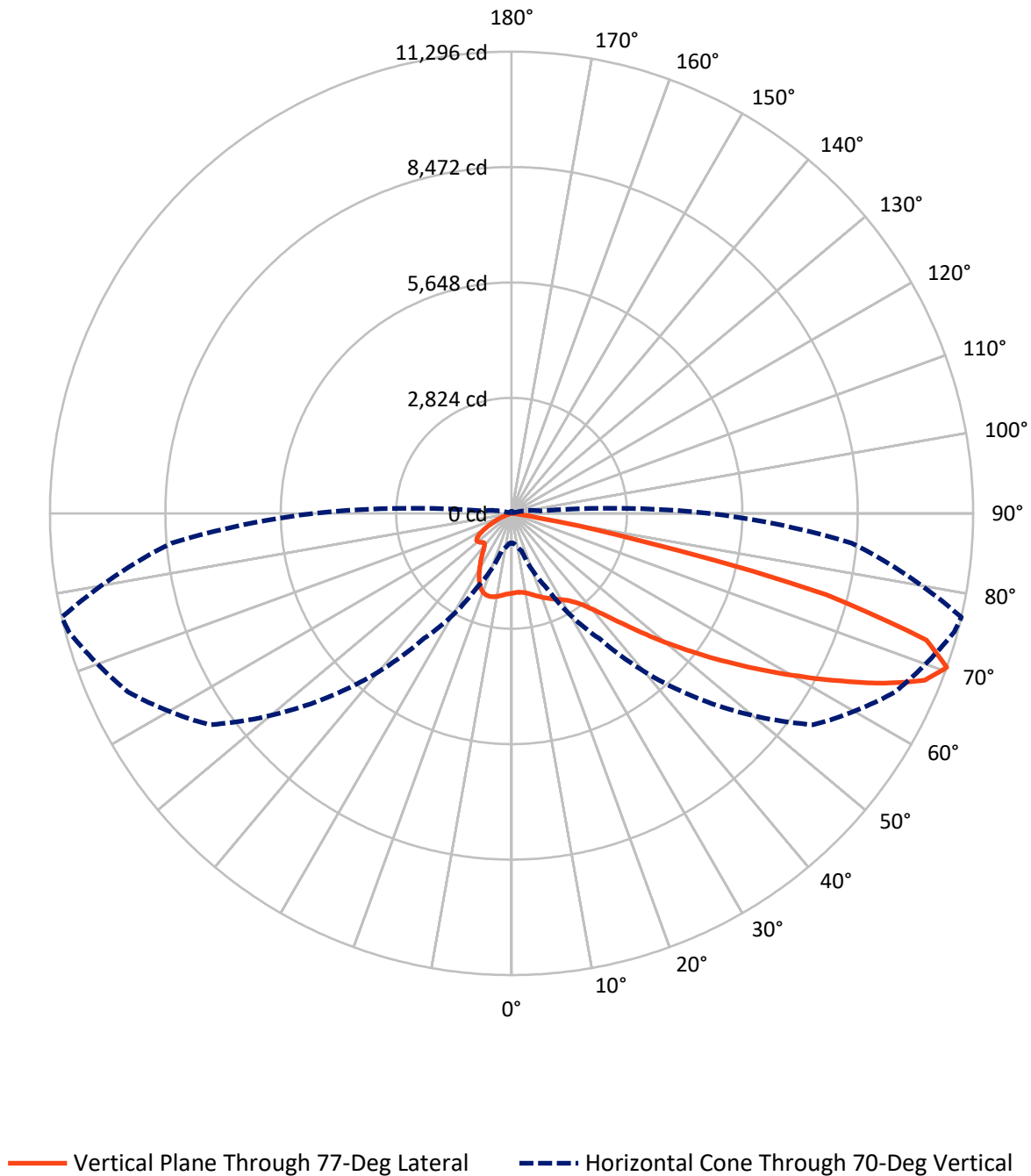
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Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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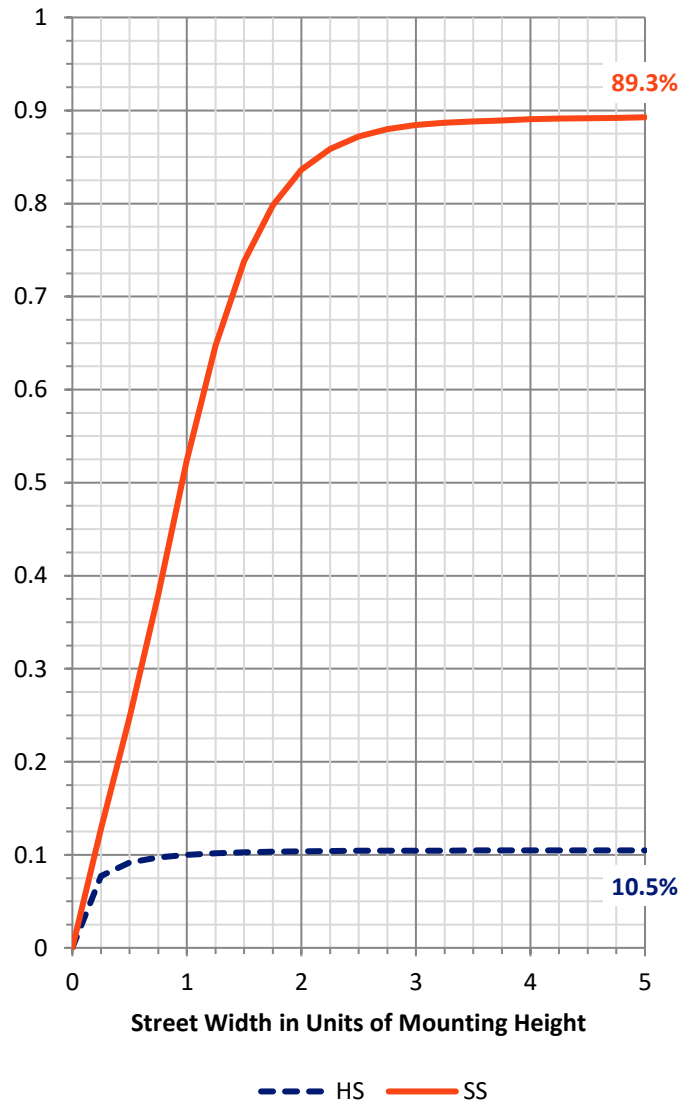
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1321.5	0.0	1321.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	11215.2	0.0	11215.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	12536.8	0.0	12536.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.5	1.3
10°-20°	400.1	3.2
20°-30°	618.8	4.9
30°-40°	1122.9	9.0
40°-50°	2119.5	16.9
50°-60°	3062.6	24.4
60°-70°	3260.0	26.0
70°-80°	1727.6	13.8
80°-90°	56.7	0.5
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°	12536.8	100.0
0°-180°	12536.8	100.0

Coefficient of Utilization



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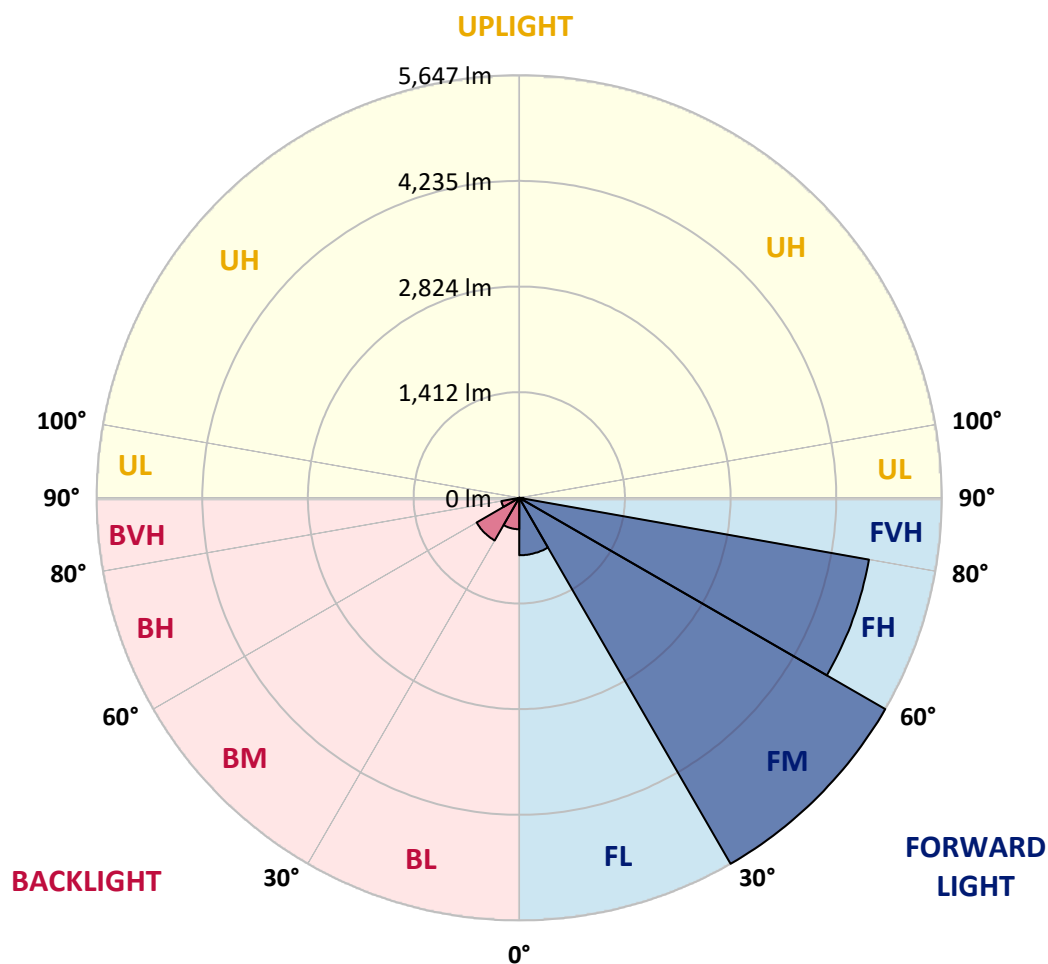
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	767.5	6.1			
FM	(30°-60°)	5647.1	45.0			
FH	(60°-80°)	4745.4	37.9			G2/5000
FVH	(80°-90°)	55.2	0.4			G1/100
BL	(0°-30°)	419.9	3.3	B1/500		
BM	(30°-60°)	657.9	5.2	B1/1000		
BH	(60°-80°)	242.3	1.9	B1/500		G1/500
BVH	(80°-90°)	1.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5
2.5°	1836.0	1852.6	1850.2	1861.3	1865.3	1881.1	1897.0	1918.3	1942.1	1941.2	1957.1
5°	1732.2	1748.9	1752.9	1767.9	1786.9	1811.4	1843.9	1886.6	1931.0	1938.1	1969.7
7.5°	1609.6	1627.0	1637.2	1667.4	1702.1	1752.9	1805.8	1868.5	1942.1	1952.3	2013.3
10°	1486.9	1502.6	1516.1	1558.8	1614.3	1689.5	1775.8	1866.0	1965.0	1980.1	2066.4
12.5°	1410.8	1425.9	1440.9	1478.2	1547.0	1638.9	1756.0	1877.1	2003.1	2024.4	2138.4
15°	1383.9	1397.4	1409.3	1442.5	1506.6	1611.1	1752.0	1900.0	2051.3	2079.8	2225.5
17.5°	1387.8	1395.0	1402.9	1428.2	1490.8	1598.5	1759.2	1939.7	2108.3	2133.6	2312.6
20°	1410.8	1414.8	1415.5	1432.9	1488.4	1596.8	1773.5	1977.6	2162.1	2196.2	2398.9
22.5°	1440.1	1441.7	1440.1	1452.0	1503.5	1608.7	1792.4	2023.6	2222.3	2254.0	2485.9
25°	1577.1	1547.0	1509.0	1486.0	1528.8	1631.7	1820.9	2085.4	2288.0	2318.9	2570.7
27.5°	2002.2	1915.9	1779.7	1627.0	1581.1	1664.9	1860.5	2147.9	2354.5	2382.2	2661.7
30°	2692.6	2579.4	2348.2	2003.8	1748.9	1734.6	1911.9	2210.4	2424.9	2455.1	2759.1
32.5°	3384.6	3356.9	3090.1	2613.4	2126.6	1889.8	1997.5	2295.2	2518.4	2542.2	2890.5
35°	4084.4	4028.1	3809.7	3338.6	2708.5	2205.7	2140.0	2406.0	2641.1	2668.1	3082.1
37.5°	4620.4	4586.4	4451.0	4063.0	3398.8	2693.4	2383.8	2577.8	2819.3	2849.3	3327.6
40°	5093.8	5078.0	5032.0	4776.4	4170.7	3331.5	2763.1	2843.8	3066.3	3101.9	3628.4
42.5°	5465.9	5503.1	5529.3	5458.0	4966.3	4059.8	3272.9	3217.5	3410.7	3447.1	4011.5
45°	5846.7	5859.4	5964.7	6067.6	5756.5	4821.5	3847.6	3655.3	3838.9	3884.1	4470.7
47.5°	6091.4	6142.0	6327.3	6508.6	6420.7	5576.7	4465.2	4172.3	4335.3	4420.1	4985.4
50°	6109.6	6205.3	6460.3	6776.2	6904.5	6295.7	5136.6	4761.3	4934.7	5028.1	5534.8
52.5°	5806.3	5955.2	6350.3	6812.7	7165.7	6904.5	5830.9	5350.3	5572.8	5694.7	6104.8
55°	4451.8	4646.5	5936.2	6614.7	7176.0	7366.1	6507.0	5963.9	6283.8	6421.5	6720.8
57.5°	3878.6	3976.7	4667.1	6271.1	6985.2	7552.1	7118.2	6548.2	7057.2	7228.3	7302.7
60°	3227.0	3356.1	3914.2	5708.9	6726.4	7570.2	7658.2	7301.9	7895.7	8088.1	7836.3
62.5°	2193.0	2333.1	2888.1	4743.1	6372.4	7561.5	8100.7	8077.7	8827.5	9034.1	8288.4
65°	1358.5	1446.5	1812.2	3873.1	5877.7	7571.1	8563.9	9019.9	9810.8	10020.6	8638.3
67.5°	1073.6	1114.0	1304.7	2973.6	5025.0	7357.3	9026.3	9905.8	10736.3	10902.5	8745.2
70°	721.3	745.8	949.3	1993.5	3738.4	6370.9	9017.5	10350.8	11212.9	11296.0	8355.7
72.5°	380.0	399.0	554.9	923.1	2258.0	4528.6	7601.2	9818.7	10738.7	10613.6	7142.0
75°	190.0	221.7	373.7	468.7	964.3	2525.5	4720.1	7741.3	8452.3	7967.7	4582.4
77.5°	144.1	174.1	308.7	308.7	335.7	850.3	1999.1	4222.2	3894.4	3242.8	1345.1
80°	91.8	118.8	270.0	233.6	140.1	216.2	520.9	1182.8	827.4	629.5	244.7
82.5°	53.8	77.6	224.9	154.4	78.4	79.9	147.3	251.7	214.5	167.1	75.2
85°	21.4	50.6	154.4	61.0	30.9	19.8	44.4	53.8	44.4	33.2	19.0
87.5°	0.0	11.9	27.0	0.0	2.4	1.5	3.2	4.0	4.0	3.2	6.4
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°	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5	1955.5
2.5°	1964.2	1965.8	1970.6	1971.4	1960.2	1946.0	1940.4	1938.1	1928.6	1927.8	1929.4
5°	1988.0	1995.1	1988.0	1967.4	1918.3	1849.4	1797.1	1754.4	1715.6	1703.8	1696.6
7.5°	2035.4	2042.6	2021.2	1940.4	1816.9	1680.0	1556.5	1469.4	1391.0	1361.7	1349.8
10°	2103.6	2113.0	2045.8	1882.7	1664.2	1444.0	1235.0	1087.8	973.0	926.3	906.5
12.5°	2189.1	2193.0	2059.2	1794.8	1465.4	1151.2	855.1	697.5	595.3	557.4	545.5
15°	2283.3	2277.8	2060.8	1675.3	1194.6	813.8	558.1	458.4	417.3	404.6	404.6
17.5°	2382.2	2359.2	2029.1	1502.6	897.8	556.6	414.1	390.3	383.1	380.0	379.2
20°	2479.6	2428.1	1971.4	1277.0	644.4	415.6	376.1	368.9	365.0	363.4	361.8
22.5°	2568.2	2480.4	1872.4	1015.0	467.9	367.4	355.5	349.1	342.0	338.9	338.0
25°	2654.5	2510.5	1733.1	770.3	374.4	343.6	334.2	322.3	312.7	308.7	307.2
27.5°	2738.5	2529.5	1558.8	570.0	334.2	321.4	304.0	287.4	280.2	278.7	277.1
30°	2828.0	2535.8	1360.9	425.2	309.5	293.8	268.3	249.4	245.4	246.2	246.2
32.5°	2937.2	2545.3	1161.4	348.4	288.9	260.5	230.4	210.6	207.5	210.6	209.8
35°	3067.8	2564.3	969.0	320.6	270.8	226.4	193.9	177.3	174.1	176.5	175.8
37.5°	3245.1	2595.2	789.4	315.1	255.7	197.9	163.1	149.6	149.6	150.5	149.6
40°	3481.1	2677.5	628.6	311.2	247.8	176.5	137.8	132.2	134.6	136.2	136.2
42.5°	3768.5	2852.5	520.2	306.4	239.1	167.1	125.0	122.7	126.7	128.2	128.2
45°	4090.8	3074.2	482.2	298.5	231.1	173.4	119.5	116.3	121.2	121.9	122.7
47.5°	4424.0	3291.1	477.4	289.8	223.2	182.9	118.0	110.8	116.3	117.2	118.0
50°	4761.3	3432.8	482.2	276.3	210.6	182.9	118.8	105.3	110.1	112.4	113.3
52.5°	5100.9	3497.7	479.0	247.0	188.4	171.8	118.8	100.6	105.3	106.9	106.9
55°	5430.3	3485.1	430.7	203.5	159.9	152.0	115.6	96.6	99.7	100.6	100.6
57.5°	5690.8	3308.5	341.2	158.4	129.9	126.7	105.3	91.8	94.2	93.4	93.4
60°	5826.9	2920.6	243.8	121.9	102.1	99.7	92.7	85.5	87.1	83.1	82.3
62.5°	5828.6	2407.6	163.1	96.6	81.6	79.1	79.1	76.8	75.2	67.3	64.9
65°	5704.2	1838.3	108.4	76.8	65.7	61.7	66.5	65.7	60.2	49.1	47.5
67.5°	5422.4	1205.0	82.3	60.2	50.6	48.3	53.1	55.5	51.5	41.2	40.4
70°	4842.8	701.4	68.1	46.7	38.0	35.7	42.7	47.5	42.7	33.2	31.7
72.5°	4022.6	378.4	55.5	34.8	26.1	23.8	34.0	38.7	34.0	24.5	23.8
75°	2610.3	202.6	42.7	23.0	13.4	15.1	25.3	28.5	23.8	15.8	14.2
77.5°	876.4	89.5	27.0	11.1	6.4	6.4	15.1	17.4	11.1	5.5	4.7
80°	195.6	37.2	11.1	4.7	2.4	2.4	3.2	3.2	1.5	0.0	0.0
82.5°	64.2	15.1	4.7	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	24.5	5.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)