

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: P971017

Luminaire Tested: **NAV-SB6C-827-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971017
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-SB6C-827-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41228.6 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 300.9
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

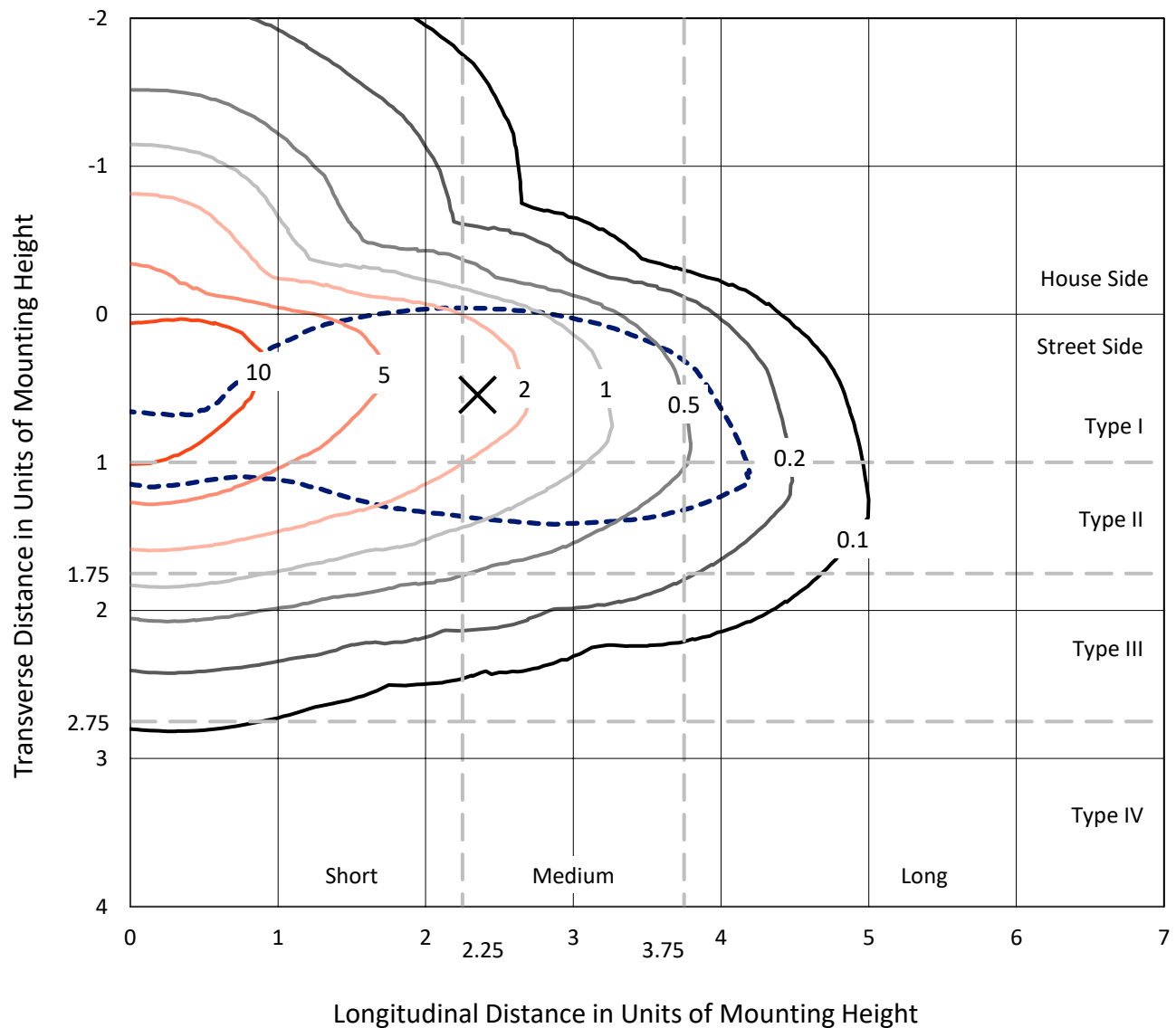


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Iso-Footcandle Lines of Horizontal Illumination

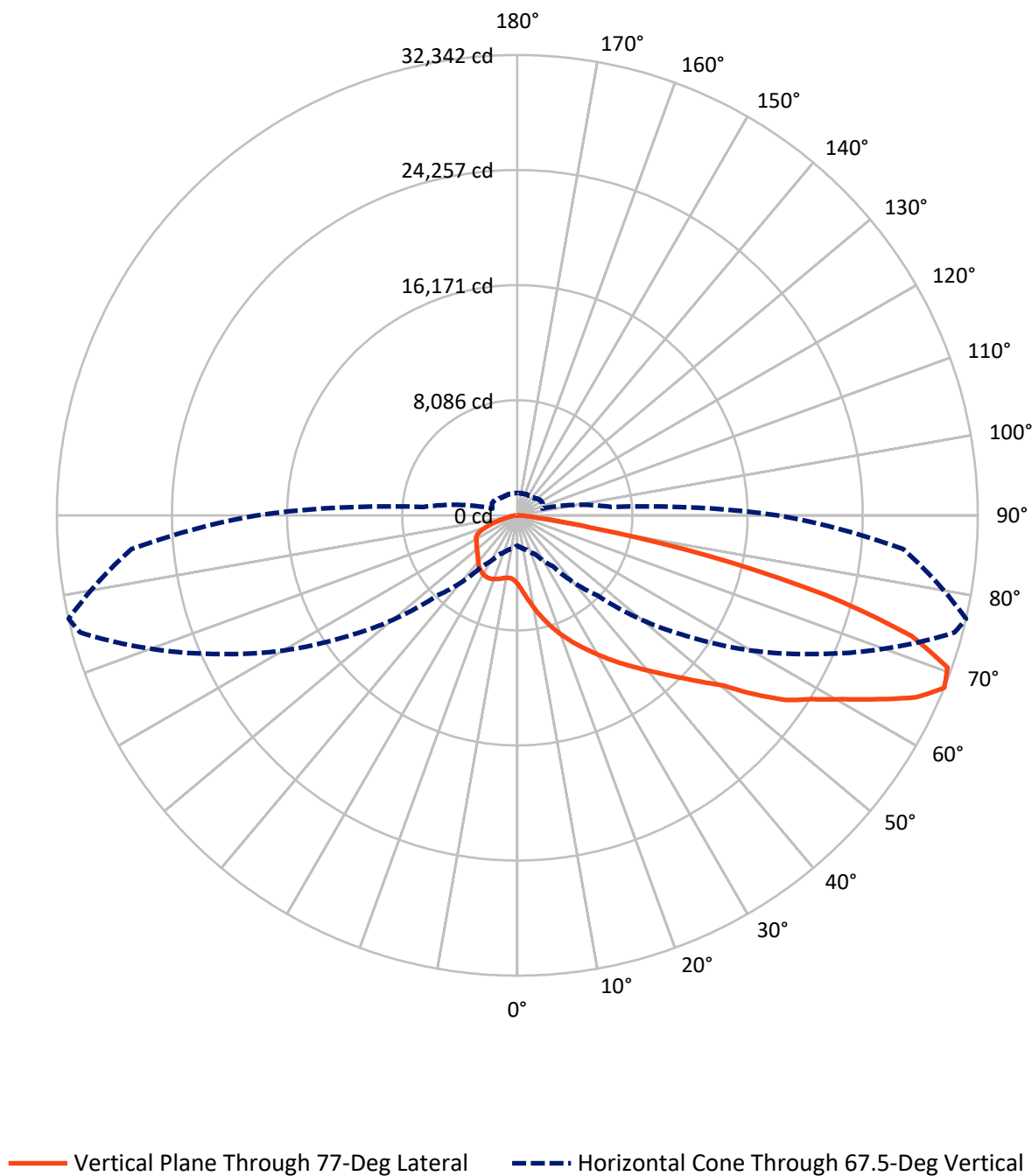
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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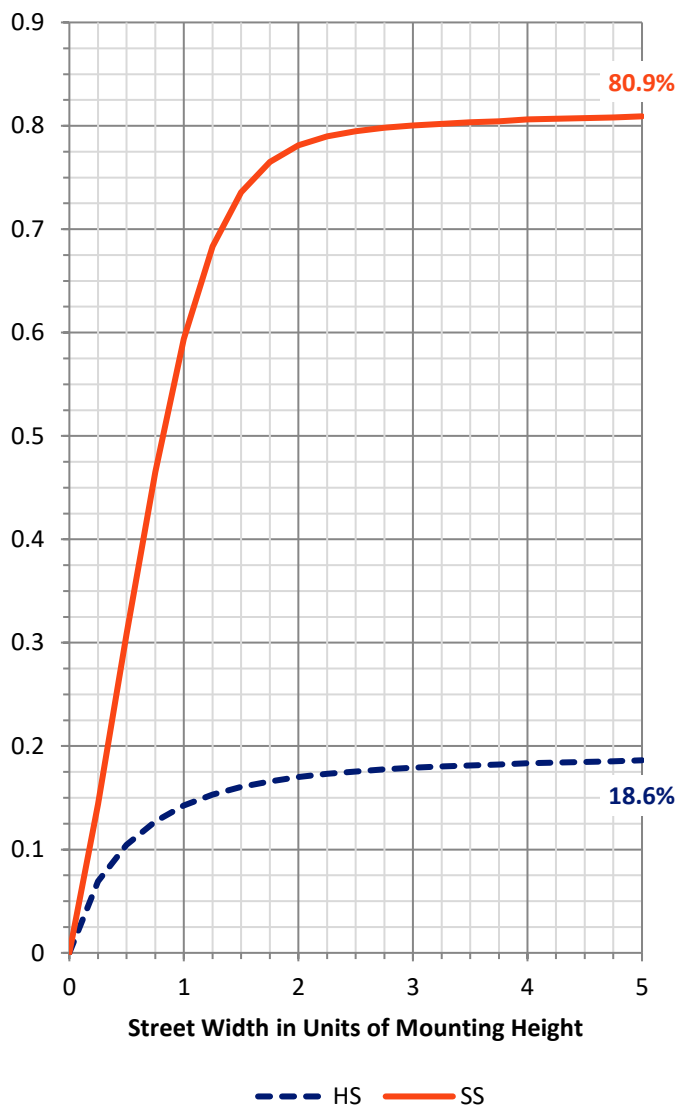
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7798.8	0.0	7798.8
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	33429.8	0.0	33429.8
	% Fixture	81.1	0.0	81.1
Total	Lumens	41228.6	0.0	41228.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.5	1.3
10°-20°	1862.8	4.5
20°-30°	3517.1	8.5
30°-40°	5666.0	13.7
40°-50°	7750.0	18.8
50°-60°	8742.1	21.2
60°-70°	8159.7	19.8
70°-80°	4472.9	10.8
80°-90°	539.5	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°	41228.6	100.0
0°-180°	41228.6	100.0

Coefficient of Utilization



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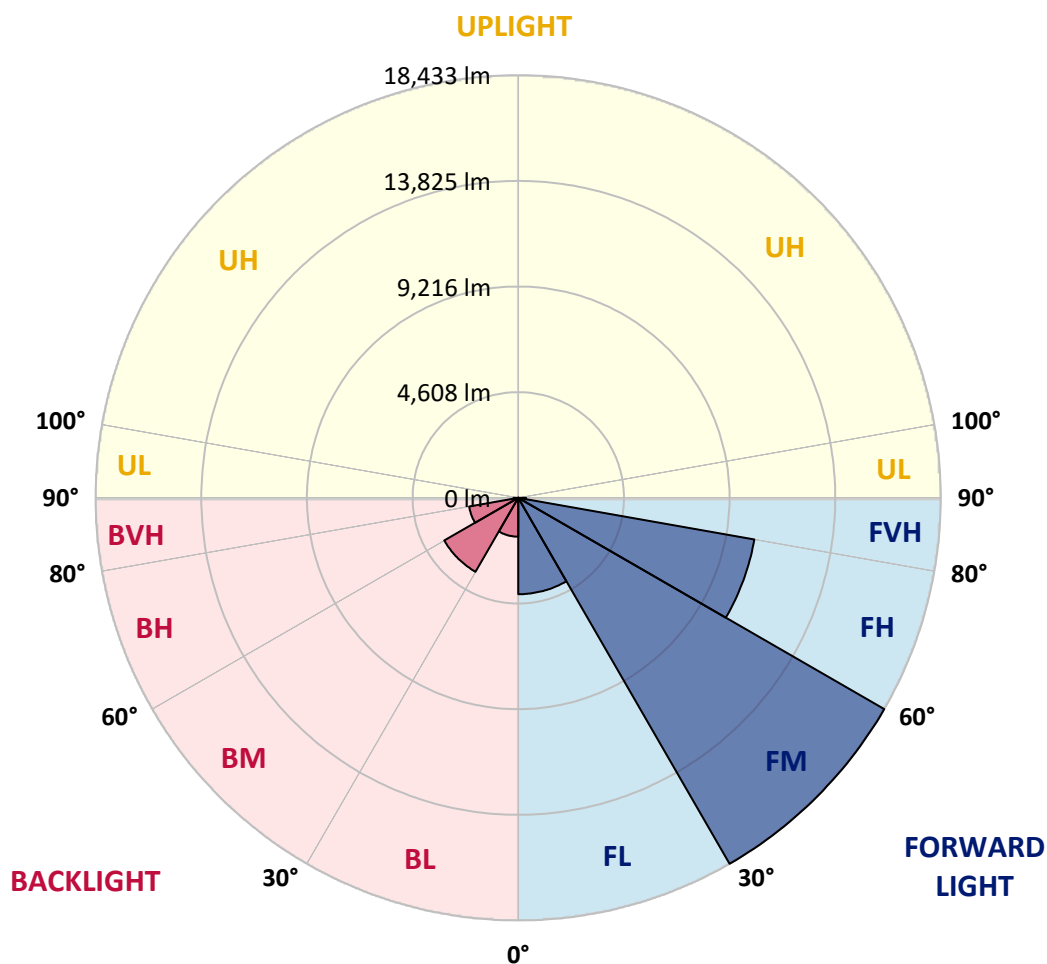
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4202.7	10.2			
FM	(30°-60°)	18432.8	44.7			
FH	(60°-80°)	10456.8	25.4			G4/12000
FVH	(80°-90°)	337.4	0.8			G3/500
BL	(0°-30°)	1695.6	4.1	B3/2500		
BM	(30°-60°)	3725.3	9.0	B3/5000		
BH	(60°-80°)	2175.7	5.3	B3/2500		G3/2500
BVH	(80°-90°)	202.1	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4
2.5°	6056.8	6099.4	6046.2	6046.2	5867.4	5773.8	5595.1	5458.8	5214.1	5171.5	5009.8
5°	7159.2	7212.4	7138.0	7106.0	6895.4	6701.7	6401.6	6105.8	5669.5	5624.8	5243.9
7.5°	8012.6	8080.8	8014.8	7980.8	7793.5	7576.4	7225.2	6812.4	6197.4	6110.0	5558.9
10°	8708.6	8719.3	8697.9	8710.8	8563.9	8385.1	8025.4	7544.4	6776.2	6657.0	5939.8
12.5°	9102.3	9151.2	9193.8	9270.4	9244.9	9134.2	8810.7	8236.1	7389.1	7235.9	6354.8
15°	9287.4	9372.6	9468.3	9644.9	9787.6	9815.3	9568.4	8978.9	8012.6	7827.5	6774.0
17.5°	9353.4	9434.3	9585.4	9840.8	10147.3	10353.7	10243.0	9700.3	8629.9	8417.0	7214.6
20°	9687.6	9711.0	9802.5	10045.1	10377.1	10719.8	10802.7	10394.1	9240.7	9000.1	7670.0
22.5°	10402.6	10355.8	10381.3	10492.0	10730.4	11062.4	11251.7	11007.1	9868.5	9591.7	8129.7
25°	11583.7	11447.6	11311.4	11183.7	11305.0	11492.3	11707.2	11619.9	10526.0	10174.9	8593.7
27.5°	13075.6	12909.7	12609.6	12190.3	12043.4	12109.5	12205.2	12188.2	11134.8	10779.3	9072.5
30°	14544.1	14350.4	13992.9	13386.4	12999.0	12824.5	12752.1	12703.2	11796.6	11417.8	9555.6
32.5°	15716.7	15563.5	15212.3	14533.5	13971.6	13673.7	13433.1	13258.7	12488.3	12109.5	10066.4
35°	16742.6	16600.0	16197.7	15457.1	14846.3	14529.2	14214.2	13841.8	13207.6	12824.5	10615.4
37.5°	17678.9	17536.3	16985.2	16214.8	15599.7	15380.4	15099.6	14467.5	13929.0	13567.2	11196.5
40°	18270.6	18238.6	17723.6	16851.1	16212.6	16104.1	16010.4	15193.2	14729.2	14393.0	11834.9
42.5°	18421.7	18491.9	18083.3	17366.1	16757.4	16670.2	16889.3	16014.7	15627.4	15306.0	12558.5
45°	18057.7	18260.0	17991.8	17504.4	17144.8	17097.9	17668.3	16912.8	16621.2	16327.5	13431.1
47.5°	17136.3	17478.9	17368.2	17300.2	17249.0	17451.2	18353.5	17866.3	17747.1	17491.6	14427.1
50°	15276.2	15925.3	16118.9	16548.8	17042.6	17725.7	18977.2	18906.9	19062.2	18804.8	15640.2
52.5°	12060.5	12954.4	14078.1	15154.9	16408.4	17634.2	19662.4	20400.9	21056.4	20915.9	17568.3
55°	9955.7	10357.9	11222.0	13197.0	15178.3	17249.0	19971.0	21607.6	23035.6	22910.1	19030.4
57.5°	8338.3	8697.9	9230.0	10879.3	13318.2	16374.4	20162.6	22344.0	24391.3	24378.5	20473.2
60°	6603.8	6984.8	7529.5	8697.9	11145.3	14863.3	20119.9	23182.4	26121.5	26227.9	22233.3
62.5°	4645.8	5065.1	5669.5	6759.2	8925.7	12905.4	19251.7	23789.0	28158.2	28447.6	24350.8
65°	3054.0	3330.6	3786.0	4726.7	6650.6	10387.8	17593.8	23867.7	30337.4	30827.0	26338.6
67.5°	2140.9	2247.4	2515.6	3026.3	4384.1	7965.9	14952.7	23052.7	31791.0	32342.2	27200.5
70°	1670.6	1723.8	1860.1	2064.4	2753.9	5356.6	11458.2	20933.0	31480.3	32054.9	26300.3
72.5°	1442.9	1494.0	1545.1	1570.6	1847.3	3307.3	7761.5	17502.3	28554.0	28943.4	22867.4
75°	1308.8	1321.6	1364.2	1355.7	1408.9	2145.2	4479.9	12752.1	22529.1	22395.0	16880.8
77.5°	1100.2	1117.4	1187.6	1176.9	1251.4	1466.4	2326.1	8229.7	14605.8	13694.9	9396.0
80°	932.1	940.6	1017.3	1004.5	1087.5	1062.0	1187.6	4194.7	6195.2	5248.1	2709.2
82.5°	323.5	400.1	776.7	800.2	830.0	642.7	685.3	1711.0	1891.9	1449.4	568.3
85°	157.4	168.1	395.9	561.8	559.8	323.5	334.2	610.8	595.9	468.2	189.4
87.5°	25.5	31.9	46.8	219.2	174.6	85.2	114.9	119.2	123.4	106.4	42.5
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°	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4	4837.4
2.5°	4890.6	4784.2	4560.7	4354.3	4192.6	4037.2	3949.9	3875.4	3832.9	3824.4	3824.4
5°	5022.5	4803.4	4396.8	4054.2	3830.7	3664.8	3577.5	3522.2	3494.5	3477.5	3475.4
7.5°	5211.9	4890.6	4311.8	3922.3	3688.2	3568.9	3524.3	3515.7	3513.7	3515.7	3522.2
10°	5473.7	5033.2	4303.3	3890.4	3694.5	3628.6	3626.4	3628.6	3637.1	3639.3	3641.3
12.5°	5756.8	5180.0	4337.3	3918.1	3775.4	3739.2	3732.8	3730.7	3737.2	3741.4	3743.5
15°	6065.3	5373.7	4394.7	3977.6	3864.8	3826.5	3820.1	3807.4	3805.2	3803.1	3801.0
17.5°	6382.5	5565.2	4458.5	4041.5	3922.3	3869.1	3845.7	3815.9	3792.4	3786.0	3792.4
20°	6703.8	5754.7	4503.2	4073.3	3926.6	3852.1	3805.2	3754.2	3713.7	3690.3	3698.8
22.5°	7046.5	5952.6	4530.9	4064.8	3888.2	3786.0	3701.0	3641.3	3579.6	3539.2	3541.3
25°	7380.6	6125.0	4528.8	4020.2	3813.7	3684.0	3575.4	3498.7	3413.7	3371.0	3371.0
27.5°	7702.0	6280.3	4475.6	3941.4	3707.3	3562.6	3432.8	3341.3	3258.3	3217.9	3215.7
30°	8033.9	6410.1	4392.6	3826.5	3581.8	3422.2	3279.6	3200.8	3126.4	3088.0	3085.9
32.5°	8363.8	6529.4	4275.6	3684.0	3437.0	3283.8	3143.4	3071.0	3026.3	3026.3	3028.5
35°	8712.8	6612.3	4120.2	3517.9	3283.8	3137.0	3026.3	2983.8	2979.5	2953.9	2947.6
37.5°	9081.0	6665.5	3930.8	3347.6	3132.7	2994.3	2960.3	2909.3	2866.7	2811.4	2802.9
40°	9468.3	6718.7	3703.0	3171.0	2973.1	2896.4	2881.6	2813.5	2692.2	2555.9	2536.8
42.5°	9938.7	6754.9	3466.9	2994.3	2805.0	2779.4	2800.7	2683.7	2490.0	2387.8	2390.0
45°	10483.5	6814.5	3249.8	2819.9	2632.6	2632.6	2722.0	2568.8	2409.2	2345.3	2356.0
47.5°	11190.0	6952.8	3047.5	2628.3	2472.9	2515.6	2547.4	2430.4	2341.0	2262.3	2260.1
50°	12211.6	7284.8	2839.0	2434.7	2351.7	2436.8	2392.1	2324.0	2219.7	2155.9	2149.5
52.5°	13480.0	7480.7	2653.8	2260.1	2247.4	2332.5	2268.6	2204.8	2126.1	2041.0	2024.0
55°	14344.1	7516.8	2498.5	2132.4	2177.1	2168.6	2145.2	2087.7	2045.2	1932.4	1934.5
57.5°	15310.2	7589.2	2370.8	2055.8	2132.4	2038.8	2030.3	1981.3	1926.0	1849.4	1823.9
60°	16465.9	7702.0	2260.1	2026.0	2094.2	1953.6	1911.1	1891.9	1836.6	1798.4	1808.9
62.5°	17725.7	7804.1	2147.4	2030.3	2049.5	1870.7	1806.9	1800.4	1766.4	1753.7	1753.7
65°	18585.5	7525.3	2006.8	2026.0	1979.2	1785.6	1704.7	1702.5	1674.8	1670.6	1668.5
67.5°	18285.5	6642.1	1817.5	1966.5	1906.9	1700.5	1611.1	1602.5	1566.3	1568.5	1568.5
70°	16782.9	5382.2	1555.7	1819.6	1817.5	1623.8	1513.1	1485.5	1436.5	1445.0	1453.6
72.5°	13965.2	3988.3	1204.6	1574.9	1674.8	1553.6	1400.4	1355.7	1294.0	1302.5	1300.3
75°	10085.5	2711.3	876.8	1198.2	1457.9	1470.6	1289.7	1213.1	1138.6	1151.4	1155.6
77.5°	5160.9	1536.6	644.8	825.7	1144.9	1336.5	1189.6	1087.5	1070.5	1189.6	1172.6
80°	1683.4	770.4	446.9	578.9	751.2	1093.9	1042.8	925.8	921.5	949.1	815.1
82.5°	502.2	325.6	287.3	381.0	415.0	838.6	900.3	700.2	602.3	634.2	655.5
85°	172.4	157.4	163.9	189.4	197.9	491.6	630.0	463.9	438.4	483.1	476.7
87.5°	40.4	55.4	46.8	42.5	42.5	119.2	244.8	193.6	268.1	178.8	172.4
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)