

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: P969466

Luminaire Tested: **NAV-SB5D-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40084.7 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 364.9
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

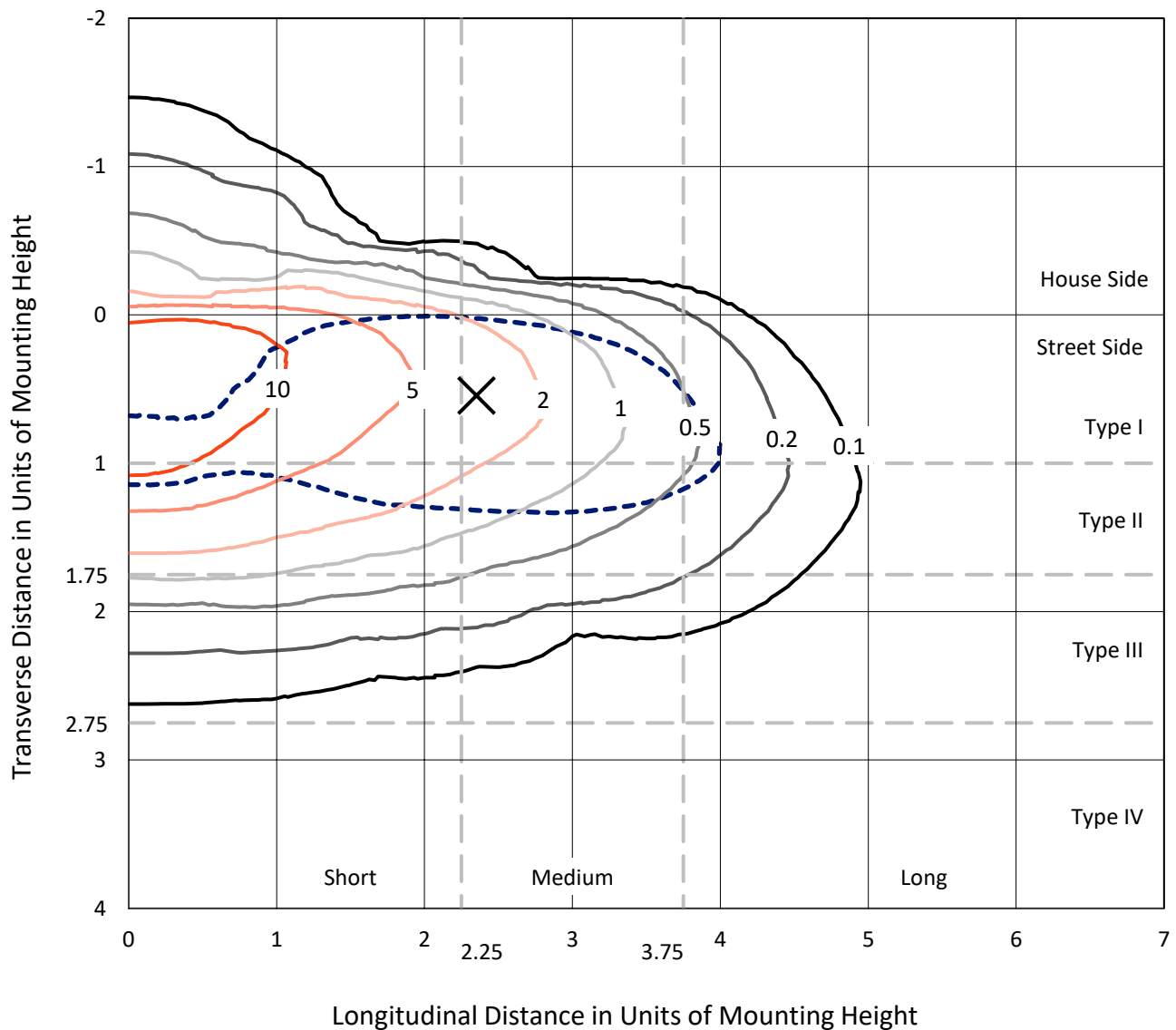


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Iso-Footcandle Lines of Horizontal Illumination

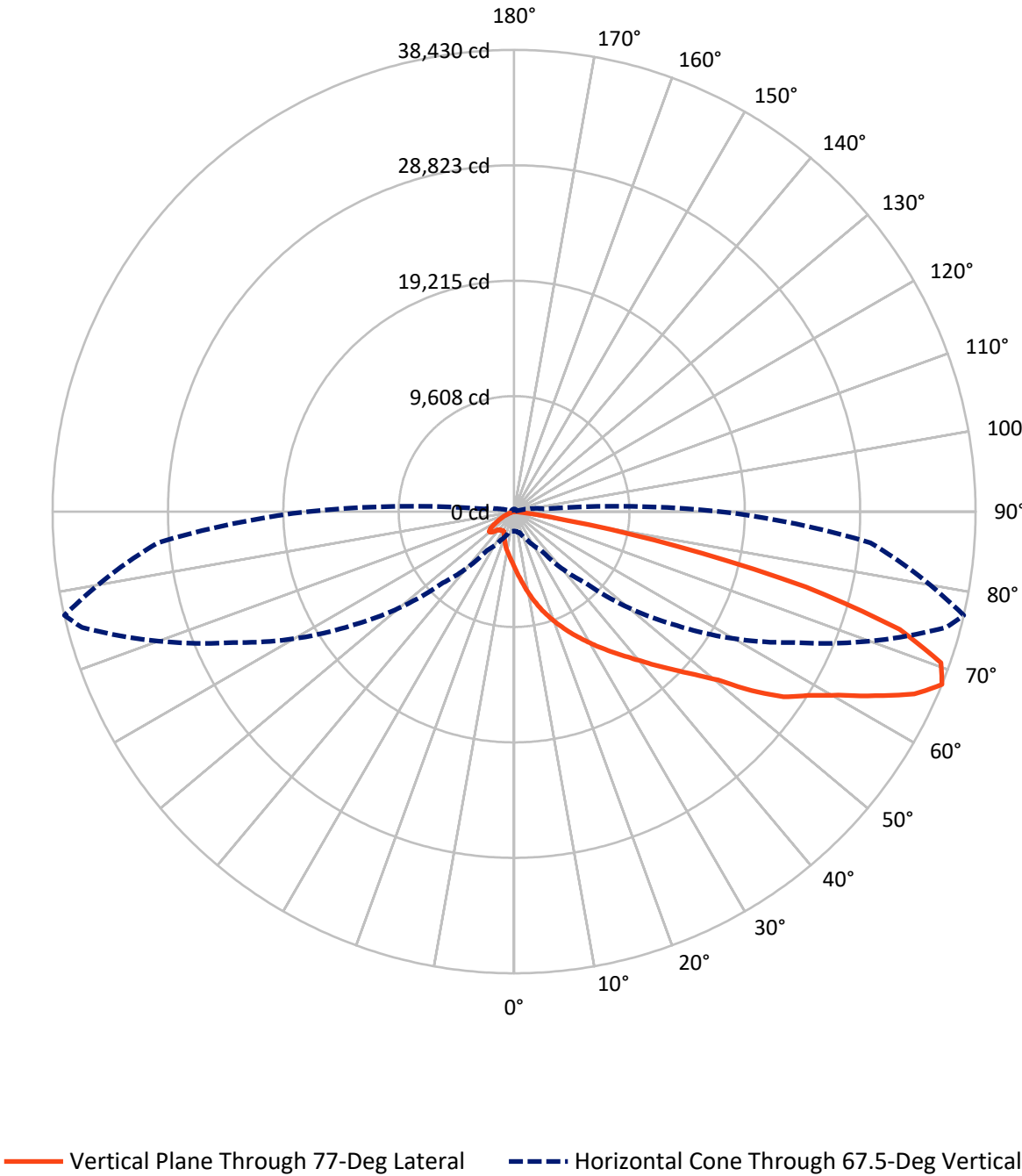
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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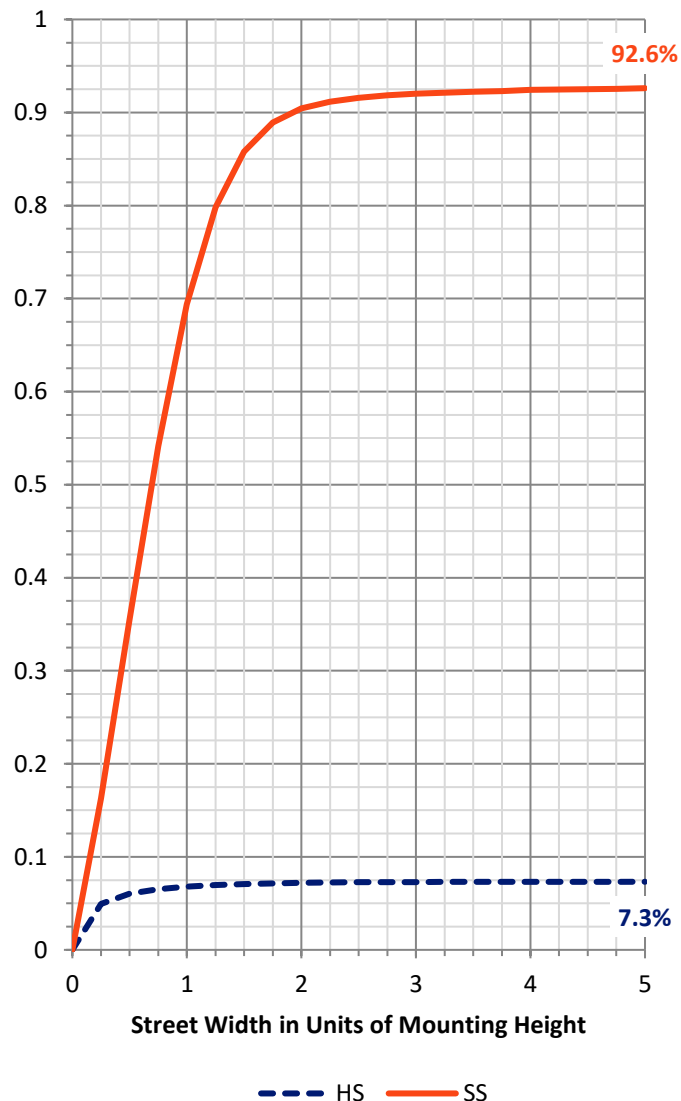
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2949.0	0.0	2949.0
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	37135.6	0.0	37135.6
	% Fixture	92.6	0.0	92.6
Total	Lumens	40084.7	0.0	40084.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.8	1.2
10°-20°	1652.1	4.1
20°-30°	3188.2	8.0
30°-40°	5534.9	13.8
40°-50°	8036.3	20.0
50°-60°	9228.7	23.0
60°-70°	8012.2	20.0
70°-80°	3773.8	9.4
80°-90°	186.6	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°	40084.7	100.0
0°-180°	40084.7	100.0

Coefficient of Utilization



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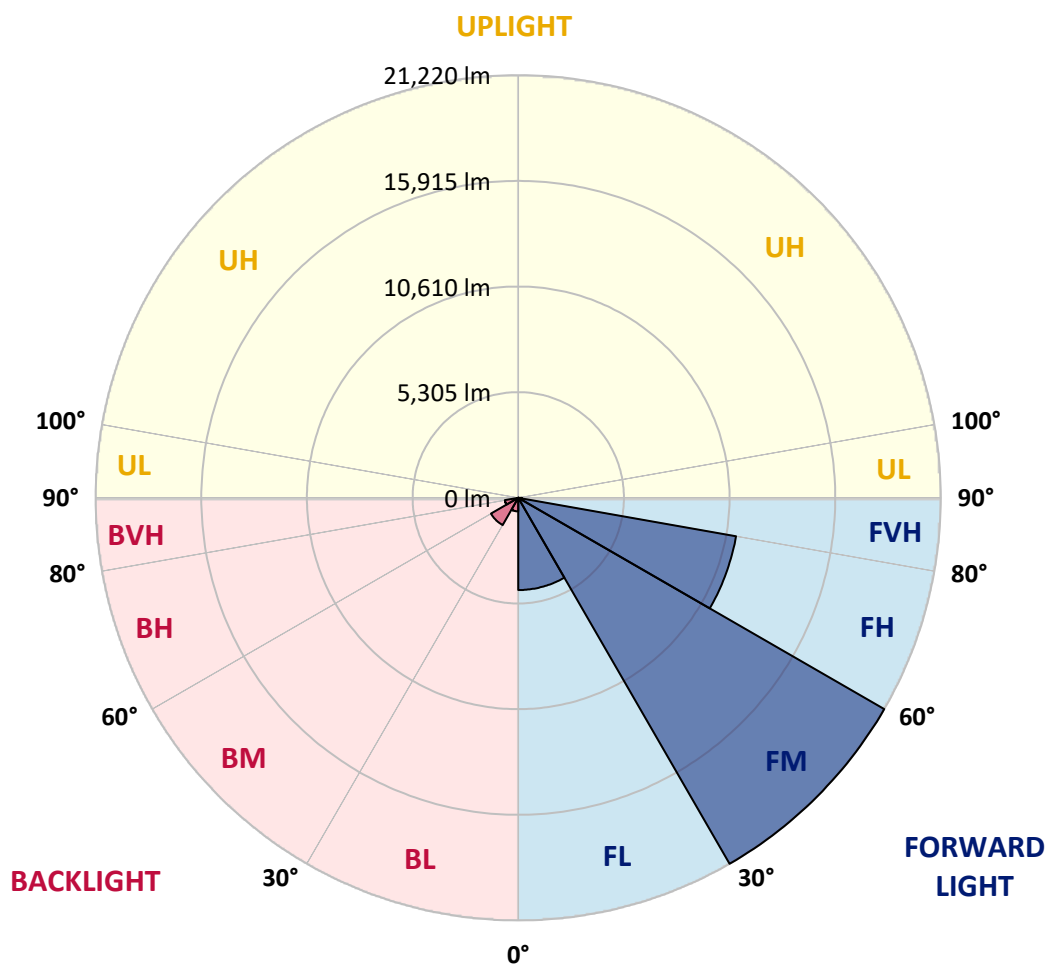
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4629.4	11.5			
FM	(30°-60°)	21219.7	52.9			
FH	(60°-80°)	11103.3	27.7			G4/12000
FVH	(80°-90°)	183.2	0.5			G2/225
BL	(0°-30°)	682.7	1.7	B2/1000		
BM	(30°-60°)	1580.1	3.9	B2/2500		
BH	(60°-80°)	682.7	1.7	B2/1000		G2/1000
BVH	(80°-90°)	3.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3
2.5°	6399.6	6439.5	6382.2	6272.7	6108.4	6001.4	5740.0	5493.6	5219.7	5132.6	4858.8
5°	7801.0	7835.8	7771.1	7651.6	7432.6	7223.5	6880.0	6364.7	5829.6	5657.8	5172.5
7.5°	8839.0	8858.9	8834.0	8724.5	8515.4	8278.9	7895.6	7285.7	6491.7	6302.5	5558.3
10°	9585.7	9650.5	9643.0	9600.7	9461.3	9269.6	8861.3	8166.9	7233.4	6989.6	5993.9
12.5°	10081.1	10153.2	10195.6	10290.2	10282.7	10160.7	9802.3	9068.0	7972.8	7686.5	6484.3
15°	10225.4	10302.6	10464.4	10683.5	10877.6	10939.8	10688.4	9951.6	8786.7	8420.8	6987.0
17.5°	10143.3	10262.8	10456.9	10802.9	11228.6	11509.8	11482.5	10805.4	9525.9	9107.8	7479.9
20°	10325.0	10439.5	10591.3	10882.5	11377.9	11888.2	12092.3	11621.9	10260.2	9822.2	7997.7
22.5°	11330.7	11310.7	11325.6	11372.9	11669.1	12174.4	12595.1	12363.7	10987.1	10539.0	8545.2
25°	12923.7	12834.0	12682.2	12425.9	12351.1	12595.1	13033.2	13020.8	11753.8	11273.4	9105.3
27.5°	14750.7	14735.8	14379.8	13762.5	13414.1	13319.5	13528.6	13660.5	12513.0	12000.2	9667.9
30°	16500.6	16540.4	16060.0	15373.0	14733.2	14362.4	14173.2	14267.8	13284.6	12784.3	10247.8
32.5°	18023.9	18066.2	17543.5	16739.6	15948.0	15499.9	15101.6	14867.7	14125.9	13580.8	10885.1
35°	19310.8	19353.1	18753.3	17864.6	17020.8	16615.0	16164.6	15524.9	14972.3	14464.5	11594.5
37.5°	20460.8	20448.3	19644.3	18748.3	17919.4	17598.3	17361.9	16333.8	15843.4	15353.1	12381.1
40°	21140.3	21192.6	20505.6	19517.4	18713.4	18479.4	18464.6	17337.0	16849.1	16373.7	13242.3
42.5°	21339.5	21431.6	20933.8	20122.3	19393.0	19139.1	19529.8	18422.2	18019.0	17556.0	14215.5
45°	20981.0	21070.6	20844.2	20281.6	19856.0	19691.7	20445.9	19547.3	19268.5	18810.5	15313.3
47.5°	19935.6	20047.7	20102.4	19982.9	19978.0	20144.7	21267.3	20732.2	20752.0	20284.1	16585.2
50°	17911.9	18101.1	18604.0	19027.1	19681.7	20503.2	22066.3	22016.5	22424.7	22021.5	18242.9
52.5°	14232.9	14501.8	16234.3	17391.7	18862.8	20435.9	22945.0	24077.6	25359.4	24769.5	20580.3
55°	11437.7	11437.7	12846.5	15012.0	17264.8	19992.8	23328.3	25416.7	27358.3	27218.9	22225.6
57.5°	9324.3	9436.4	10335.0	12249.2	14952.3	18937.5	23564.7	26258.0	28968.8	28866.7	23833.6
60°	5755.0	5996.4	7694.0	9583.2	12321.3	17058.2	23415.4	27109.3	30922.7	31004.8	25770.1
62.5°	3240.8	3330.5	4087.2	6895.0	9580.8	14531.6	22272.9	27584.8	33421.9	33770.3	27766.4
65°	2237.8	2282.6	2573.8	4291.3	6641.1	11569.6	20040.2	27288.6	35925.9	36630.3	29459.1
67.5°	1625.4	1647.8	1829.5	2621.0	3940.3	8388.4	16540.4	25795.0	37252.6	38430.0	29782.7
70°	1249.6	1264.4	1396.5	1722.5	2327.4	5177.5	12012.6	22825.5	36291.8	37698.2	28124.9
72.5°	1015.6	1030.5	1132.5	1274.5	1543.2	3061.7	7280.8	18536.7	32050.3	33568.6	23943.2
75°	856.3	876.2	968.3	1060.4	1209.7	1966.5	3415.1	12908.7	24102.5	25098.1	16649.9
77.5°	475.4	438.1	786.6	878.6	1020.6	1244.6	1598.1	7596.9	13498.6	13775.0	7387.8
80°	296.2	306.2	624.7	706.9	784.1	627.3	731.8	2924.7	4679.6	4445.6	1431.3
82.5°	17.4	39.9	480.4	510.2	537.6	268.9	276.3	993.1	1127.6	1035.5	253.9
85°	0.0	0.0	219.0	176.7	186.7	77.2	79.6	231.4	151.8	164.3	49.8
87.5°	0.0	0.0	0.0	5.0	0.0	7.5	15.0	19.9	7.5	9.9	17.4
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°	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3	4622.3
2.5°	4684.6	4510.3	4156.9	3810.8	3529.6	3268.2	3081.6	2904.8	2815.3	2810.2	2805.3
5°	4826.4	4460.6	3753.7	3128.8	2626.0	2222.8	1961.4	1774.8	1680.2	1647.8	1642.9
7.5°	5025.6	4475.5	3400.1	2531.4	1939.1	1593.1	1443.7	1384.0	1364.1	1341.6	1336.7
10°	5277.0	4510.3	3084.0	2038.6	1528.4	1354.1	1294.4	1269.5	1254.5	1239.6	1234.6
12.5°	5558.3	4542.7	2770.5	1692.6	1344.2	1254.5	1212.2	1182.3	1162.5	1145.0	1140.0
15°	5832.0	4562.6	2444.3	1451.2	1249.6	1177.4	1132.5	1100.2	1072.9	1052.9	1050.4
17.5°	6103.4	4590.0	2138.1	1306.8	1172.4	1100.2	1055.4	1015.6	993.1	970.8	968.3
20°	6404.6	4585.0	1849.4	1204.8	1095.2	1023.1	975.7	938.4	916.0	891.1	888.7
22.5°	6683.4	4560.1	1595.5	1117.7	1015.6	945.9	893.6	856.3	833.8	814.0	811.5
25°	7004.4	4540.2	1384.0	1038.0	941.0	871.2	814.0	779.1	754.2	736.8	734.3
27.5°	7313.2	4510.3	1229.6	965.8	868.7	801.6	746.7	706.9	684.5	672.1	672.1
30°	7616.8	4502.8	1172.4	896.1	804.0	736.8	682.0	644.7	627.3	622.3	619.8
32.5°	7982.7	4522.8	1197.3	871.2	744.3	677.0	624.7	597.4	579.9	579.9	579.9
35°	8373.5	4517.8	1234.6	893.6	704.4	617.4	577.5	560.1	542.6	542.6	542.6
37.5°	8863.9	4525.3	1264.4	930.9	689.5	567.5	545.1	522.8	512.8	512.8	512.8
40°	9595.6	4771.7	1249.6	963.3	684.5	532.7	487.9	480.4	472.9	472.9	472.9
42.5°	10491.8	5306.8	1269.5	965.8	682.0	507.8	448.0	463.0	445.6	443.1	440.5
45°	11472.5	5891.8	1396.5	913.5	679.6	495.4	428.1	445.6	418.2	418.2	418.2
47.5°	12445.8	6471.7	1525.8	838.9	672.1	492.8	410.7	400.8	393.3	395.8	395.8
50°	13787.4	6944.7	1575.6	736.8	654.7	487.9	378.3	380.9	375.9	380.9	380.9
52.5°	15248.5	7044.3	1515.9	622.3	604.9	472.9	356.0	365.9	363.5	368.4	368.4
55°	16159.5	6937.3	1252.0	517.7	527.7	413.2	333.5	353.4	353.4	353.4	353.4
57.5°	17100.5	6481.8	888.7	420.7	438.1	338.6	313.6	341.0	338.6	336.0	336.0
60°	17777.5	5744.9	585.0	346.0	348.5	278.8	291.2	321.1	318.6	306.2	306.2
62.5°	18282.8	4931.0	375.9	293.8	266.3	251.4	266.3	291.2	281.3	253.9	248.9
65°	18225.5	3803.5	288.7	251.4	219.0	219.0	231.4	253.9	224.1	179.2	174.2
67.5°	17162.7	2573.8	238.9	211.6	184.2	181.7	191.7	211.6	191.7	151.8	146.9
70°	15263.5	1682.6	191.7	164.3	146.9	134.4	154.4	181.7	161.7	122.0	117.0
72.5°	12388.5	1025.5	144.3	119.5	107.0	87.1	122.0	149.3	129.5	89.6	84.7
75°	8015.1	522.8	99.5	77.2	57.3	52.3	89.6	112.0	89.6	54.7	47.3
77.5°	3066.6	219.0	54.7	34.8	29.8	24.9	49.8	67.2	37.3	12.4	9.9
80°	589.9	92.1	27.4	17.4	15.0	9.9	7.5	5.0	0.0	0.0	0.0
82.5°	102.1	29.8	9.9	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	34.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.4	0.0	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)