

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: P969505

Luminaire Tested: **NAV-SB5D-835-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969505
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48903.8 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

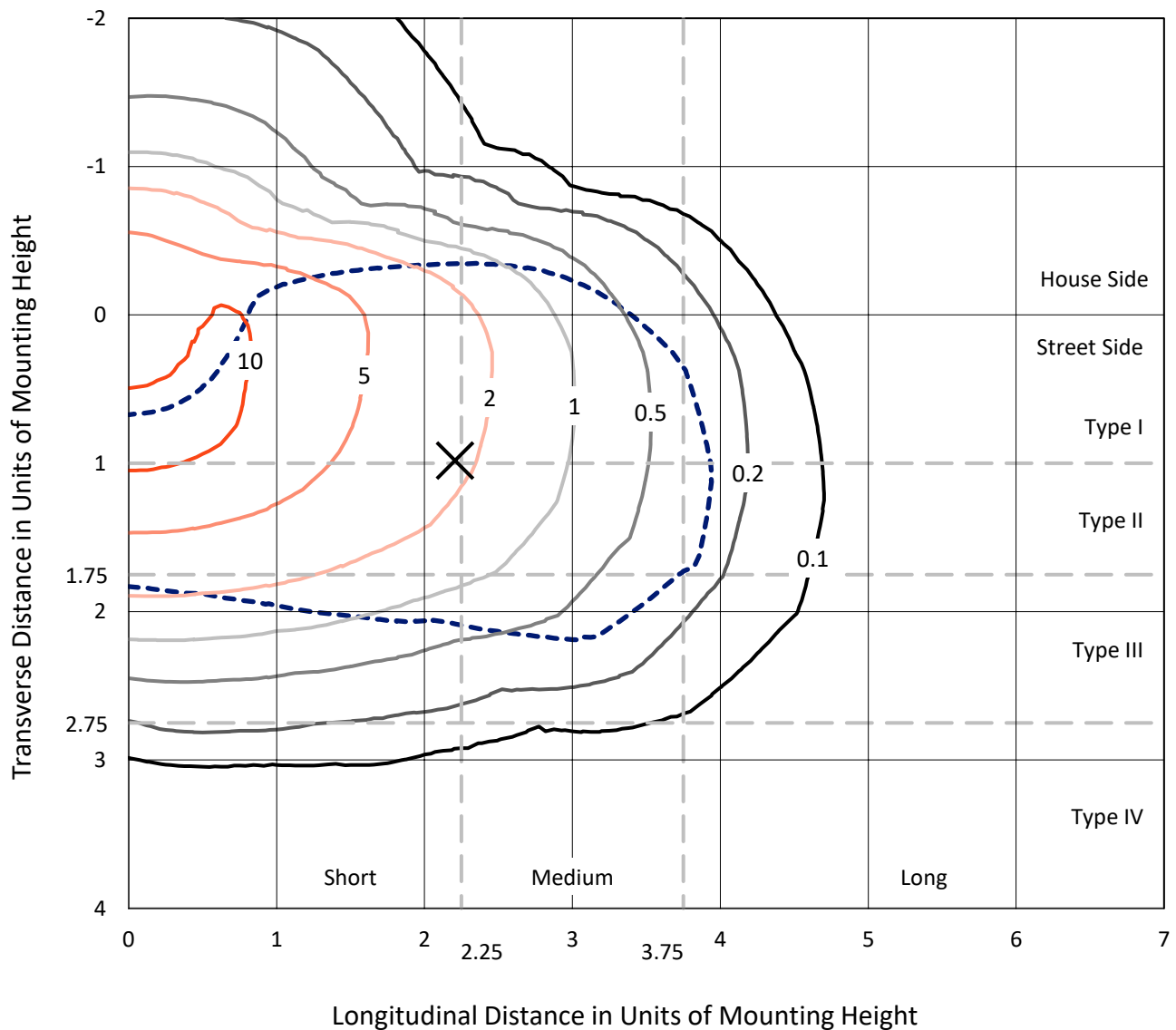
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

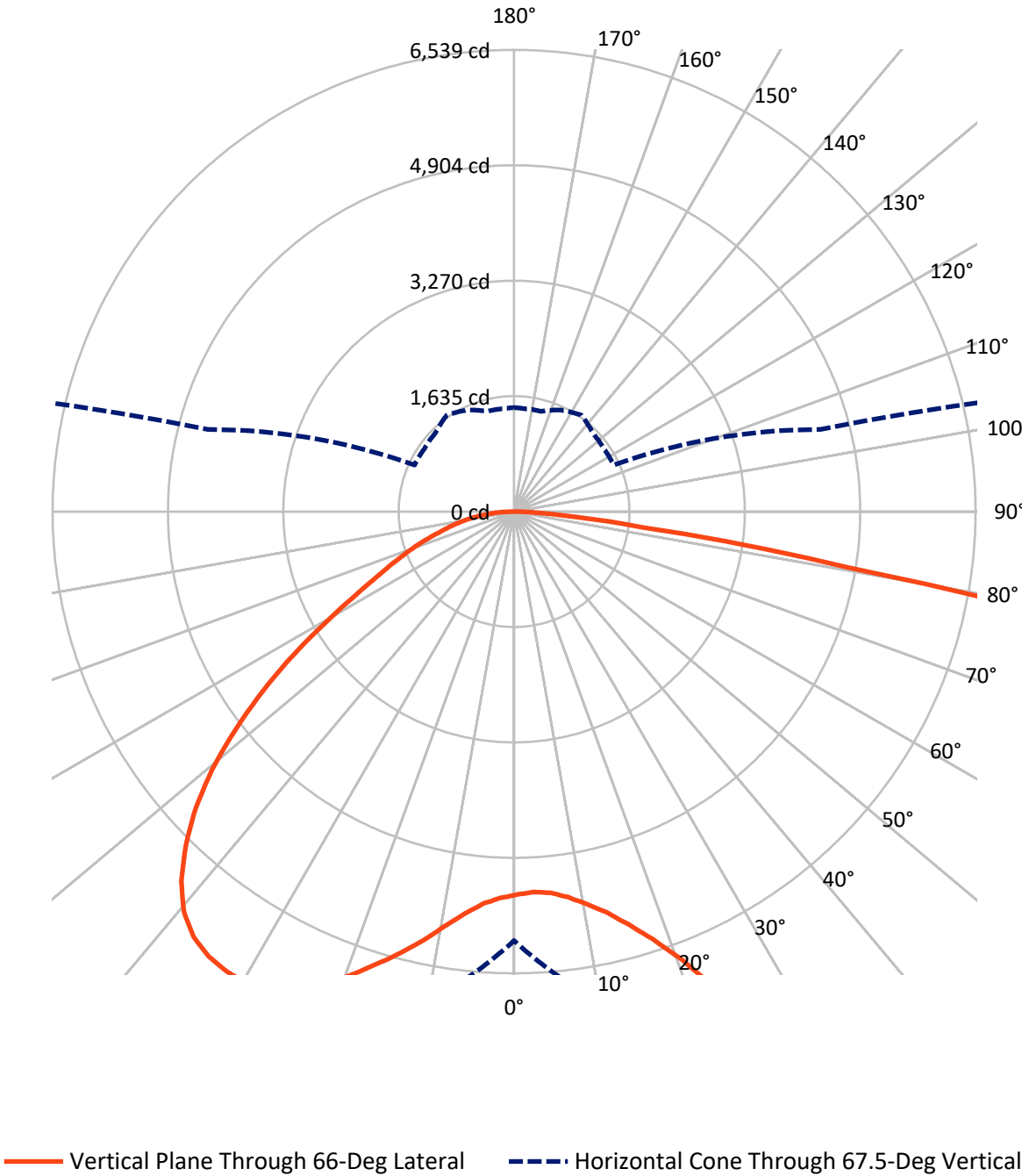
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.3 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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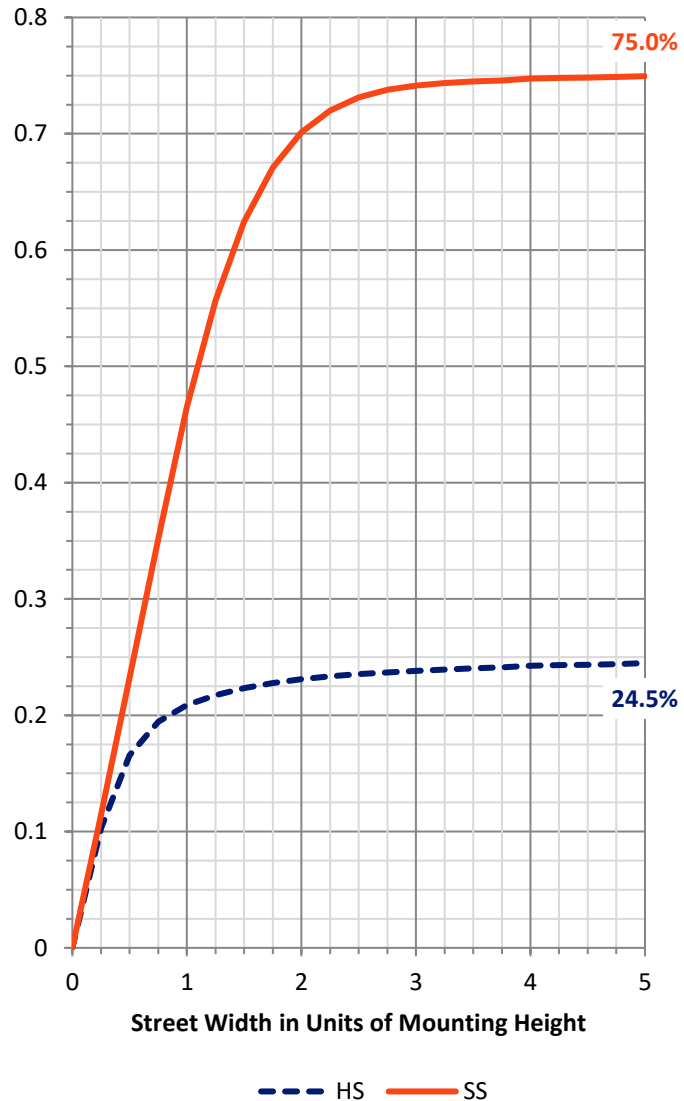
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12159.8	0.0	12159.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	36744.0	0.0	36744.0
	% Fixture	75.1	0.0	75.1
Total	Lumens	48903.8	0.0	48903.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	537.8	1.1
10°-20°	1776.7	3.6
20°-30°	3424.6	7.0
30°-40°	6004.5	12.3
40°-50°	8926.8	18.3
50°-60°	11315.5	23.1
60°-70°	11072.0	22.6
70°-80°	5281.4	10.8
80°-90°	564.4	1.2
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°	48903.8	100.0
0°-180°	48903.8	100.0

Coefficient of Utilization



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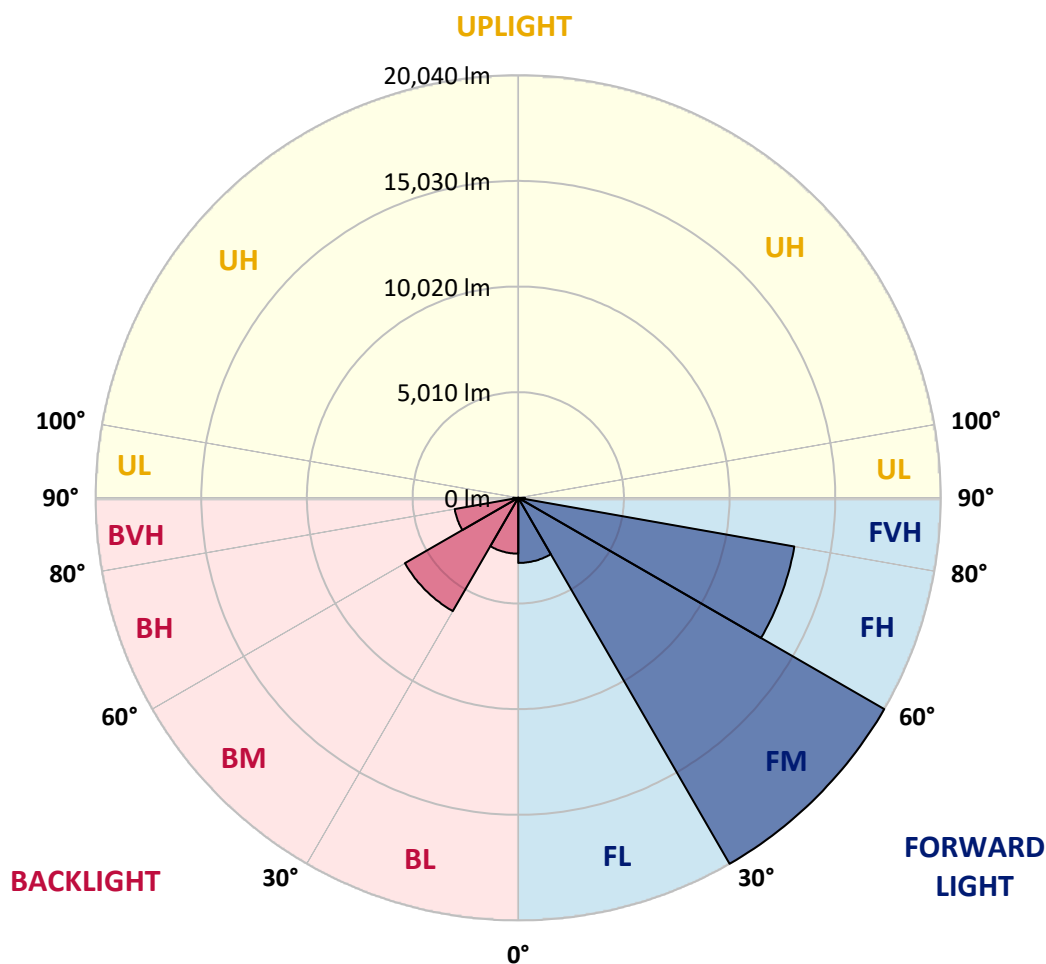
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3090.2	6.3			
FM	(30°-60°)	20040.3	41.0			
FH	(60°-80°)	13293.4	27.2			G5
FVH	(80°-90°)	320.0	0.7			G3/500
BL	(0°-30°)	2648.8	5.4	B4/5000		
BM	(30°-60°)	6206.5	12.7	B4/8500		
BH	(60°-80°)	3060.0	6.3	B4/5000		G4/5000
BVH	(80°-90°)	244.4	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1
2.5°	5367.5	5398.4	5390.7	5377.9	5375.3	5380.4	5388.1	5395.8	5393.2	5406.1	5426.7
5°	5352.1	5383.0	5380.4	5380.4	5390.7	5411.2	5424.1	5436.9	5424.1	5439.5	5467.8
7.5°	5362.4	5385.6	5395.8	5406.1	5431.8	5470.3	5501.2	5529.5	5514.0	5532.0	5568.0
10°	5493.5	5511.4	5521.7	5521.7	5539.7	5583.4	5614.2	5665.6	5652.8	5681.1	5727.3
12.5°	5732.4	5750.4	5750.4	5740.1	5752.9	5781.2	5791.5	5848.0	5824.9	5871.2	5917.4
15°	6025.4	6061.3	6033.0	6015.0	6020.1	6048.4	6045.9	6089.5	6066.5	6105.0	6146.1
17.5°	6349.1	6395.3	6349.1	6346.5	6336.2	6367.1	6369.7	6408.2	6367.1	6395.3	6423.6
20°	6731.9	6796.2	6757.6	6770.4	6747.4	6760.2	6773.0	6829.6	6765.3	6785.9	6778.1
22.5°	7271.5	7348.5	7307.4	7356.3	7340.8	7330.6	7328.0	7428.3	7328.0	7335.7	7261.2
25°	8057.7	8150.3	8078.3	8145.1	8145.1	8178.5	8217.0	8345.6	8178.5	8129.7	7937.0
27.5°	9219.2	9311.6	9170.3	9211.5	9198.6	9280.8	9239.7	9558.3	9378.4	9298.8	8910.8
30°	10616.9	10781.4	10514.1	10503.9	10491.0	10622.1	10681.1	10891.9	10709.4	10629.8	10162.2
32.5°	12127.7	12299.9	11981.2	11888.8	11840.0	11919.6	11870.8	12040.4	11914.5	11791.1	11213.0
35°	13725.9	13895.5	13592.3	13412.4	13217.2	13050.2	12875.4	12919.1	12800.9	12613.3	12014.6
37.5°	15236.7	15547.6	15226.5	15033.8	14674.0	14347.7	13859.5	13656.6	13546.1	13373.9	12770.1
40°	16775.9	16953.1	16709.0	16544.6	16154.0	15642.7	14861.6	14432.5	14283.5	14116.5	13605.1
42.5°	17909.0	18078.5	17947.5	17834.5	17528.6	16935.2	15925.3	15388.3	15172.5	14985.0	14550.7
45°	18808.2	18934.1	18851.9	18893.0	18762.0	18186.5	17027.6	16413.5	16190.0	15961.3	15619.6
47.5°	19170.6	19304.1	19435.2	19679.3	19902.8	19478.9	18212.1	17523.5	17287.1	17053.3	16716.7
50°	19129.5	19265.6	19645.9	20164.9	20858.6	20717.3	19460.9	18705.4	18487.1	18219.9	17909.0
52.5°	18800.6	18954.7	19442.9	20306.3	21411.1	21644.9	20732.8	19926.0	19720.4	19401.8	19090.9
55°	17937.2	18029.8	18762.0	19985.0	21542.1	22292.4	21979.0	21226.1	21020.5	20576.1	20236.9
57.5°	16336.4	16470.1	17536.4	19119.1	21213.2	22731.7	23073.5	22593.0	22395.2	21755.4	21400.8
60°	14247.5	14460.8	15681.3	17664.8	20375.6	22729.2	24067.9	23936.8	23772.4	22916.7	22546.8
62.5°	11883.6	12130.3	13304.5	15609.3	18911.0	22084.2	24689.7	25062.3	24977.5	23988.3	23515.4
65°	9126.6	9296.2	10465.4	12950.0	16632.0	20699.4	24761.6	25830.5	25845.9	24802.7	24021.6
67.5°	6076.7	6564.9	7579.9	9717.6	13579.5	18435.6	24129.5	25956.4	26105.4	25082.8	23767.3
70°	2965.1	3607.5	4601.8	6315.6	9717.6	14964.4	22477.4	24923.5	25255.0	24265.7	22251.3
72.5°	1230.7	1438.9	1981.0	3116.7	5578.3	10097.9	19157.7	22122.8	22737.0	21501.0	18708.1
75°	829.9	899.3	1133.1	1598.2	2541.2	4979.6	13815.9	16495.7	17485.0	16238.9	13273.6
77.5°	639.8	683.5	824.8	1117.7	1510.8	1883.4	7394.9	9941.2	10452.4	9676.5	6906.7
80°	503.6	537.0	616.6	814.5	1071.4	1007.3	2520.6	4504.3	4799.7	4026.3	2219.9
82.5°	436.9	449.7	442.0	552.5	711.8	588.3	827.4	1662.4	1834.5	1331.0	724.6
85°	316.0	352.0	367.5	341.7	377.7	298.1	339.2	588.3	647.5	578.1	408.6
87.5°	128.4	190.1	233.8	221.0	138.8	84.8	105.4	172.2	197.8	215.9	133.7
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°	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1	5424.1
2.5°	5429.2	5447.2	5460.1	5475.4	5485.7	5501.2	5532.0	5550.0	5552.5	5565.4	5562.8
5°	5478.0	5503.7	5532.0	5573.1	5619.4	5657.9	5717.0	5758.1	5773.5	5786.3	5783.8
7.5°	5583.4	5619.4	5670.7	5742.7	5809.5	5860.8	5932.8	5981.6	6030.5	6048.4	6051.0
10°	5740.1	5791.5	5866.0	5963.7	6035.6	6102.4	6177.0	6218.1	6266.8	6287.5	6297.7
12.5°	5935.4	5989.4	6087.0	6223.2	6290.0	6336.2	6361.9	6351.6	6361.9	6379.9	6385.0
15°	6158.9	6218.1	6328.6	6474.9	6521.3	6480.2	6423.6	6372.2	6364.5	6369.7	6387.6
17.5°	6423.6	6467.2	6595.8	6719.1	6685.7	6516.1	6392.7	6310.5	6269.4	6256.6	6274.5
20°	6793.6	6793.6	6899.0	6976.0	6752.5	6464.7	6272.0	6138.4	6053.5	6017.6	6009.9
22.5°	7243.3	7202.2	7268.9	7215.0	6739.6	6320.8	6053.5	5822.3	5693.9	5642.5	5634.7
25°	7813.7	7764.8	7746.8	7412.8	6647.1	6092.1	5657.9	5377.9	5264.8	5236.5	5241.6
27.5°	8674.4	8551.1	8317.3	7520.7	6477.6	5732.4	5195.4	4935.9	4871.6	4874.2	4882.0
30°	9820.4	9573.7	9000.7	7538.7	6200.0	5223.7	4722.6	4537.6	4506.8	4519.6	4563.3
32.5°	10881.5	10647.7	9699.6	7456.5	5773.5	4725.1	4298.6	4175.3	4129.1	4144.5	4165.1
35°	11714.0	11649.8	10347.1	7340.8	5249.3	4257.5	3918.4	3813.0	3723.1	3702.5	3718.0
37.5°	12500.3	12474.6	10832.7	7179.0	4730.4	3926.1	3612.6	3473.8	3342.8	3270.9	3273.4
40°	13363.6	13337.9	11151.4	6929.7	4270.4	3638.3	3337.7	3155.3	2993.4	2862.3	2875.2
42.5°	14334.8	14183.2	11303.0	6572.6	3879.8	3394.2	3114.2	2867.4	2654.2	2533.5	2541.2
45°	15396.0	15054.3	11300.4	6117.8	3550.9	3170.6	2875.2	2525.7	2327.9	2214.8	2209.7
47.5°	16521.5	15886.8	11161.6	5614.2	3232.3	2924.0	2505.2	2238.0	2106.9	2037.6	2022.1
50°	17682.9	16665.4	10925.3	5036.1	2906.1	2644.0	2274.0	2091.5	1991.3	1927.1	1903.9
52.5°	18774.8	17371.9	10640.0	4380.8	2574.6	2371.5	2171.2	2029.8	1924.5	1852.6	1821.7
55°	19789.8	17980.9	10236.7	3710.3	2304.8	2189.2	2122.4	2004.2	1883.4	1798.6	1765.2
57.5°	20691.7	18376.6	9540.3	3080.7	2112.1	2063.2	2071.0	1960.5	1821.7	1749.8	1703.6
60°	21442.0	18666.9	8510.0	2497.5	1955.3	1939.9	1991.3	1878.2	1716.4	1634.2	1598.2
62.5°	21891.5	18661.8	7245.8	2045.3	1821.7	1826.9	1886.0	1775.5	1611.0	1533.9	1510.8
65°	21853.0	18204.4	5858.3	1749.8	1693.3	1698.4	1775.5	1662.4	1523.7	1477.4	1474.9
67.5°	21079.6	17089.3	4493.9	1557.1	1552.0	1575.0	1665.0	1585.4	1469.7	1464.6	1472.3
70°	18985.6	14774.2	3237.5	1402.9	1405.5	1438.9	1557.1	1536.5	1441.5	1451.7	1449.1
72.5°	15223.9	11264.4	2173.7	1241.1	1243.6	1297.5	1454.3	1497.9	1413.2	1549.4	1569.9
75°	10139.0	7024.8	1397.8	1068.9	1071.4	1140.8	1364.4	1423.4	1336.1	1544.3	1557.1
77.5°	4871.6	3157.8	1012.4	899.3	899.3	963.5	1179.4	1274.5	1138.3	1200.0	1099.7
80°	1682.9	1187.1	796.5	724.6	709.2	752.9	994.4	1104.8	981.5	904.5	847.9
82.5°	662.9	616.6	639.8	562.7	511.3	539.6	773.4	912.1	722.0	652.6	650.1
85°	380.3	400.9	452.2	372.6	295.5	331.5	567.8	655.2	544.7	480.5	490.8
87.5°	102.8	141.3	208.1	192.7	133.7	141.3	269.8	362.3	313.4	241.5	249.3
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)