

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: P971605

Luminaire Tested: **NAV-SB6D-835-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971605
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-SB6D-835-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3500K, 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: 49672.5 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G5

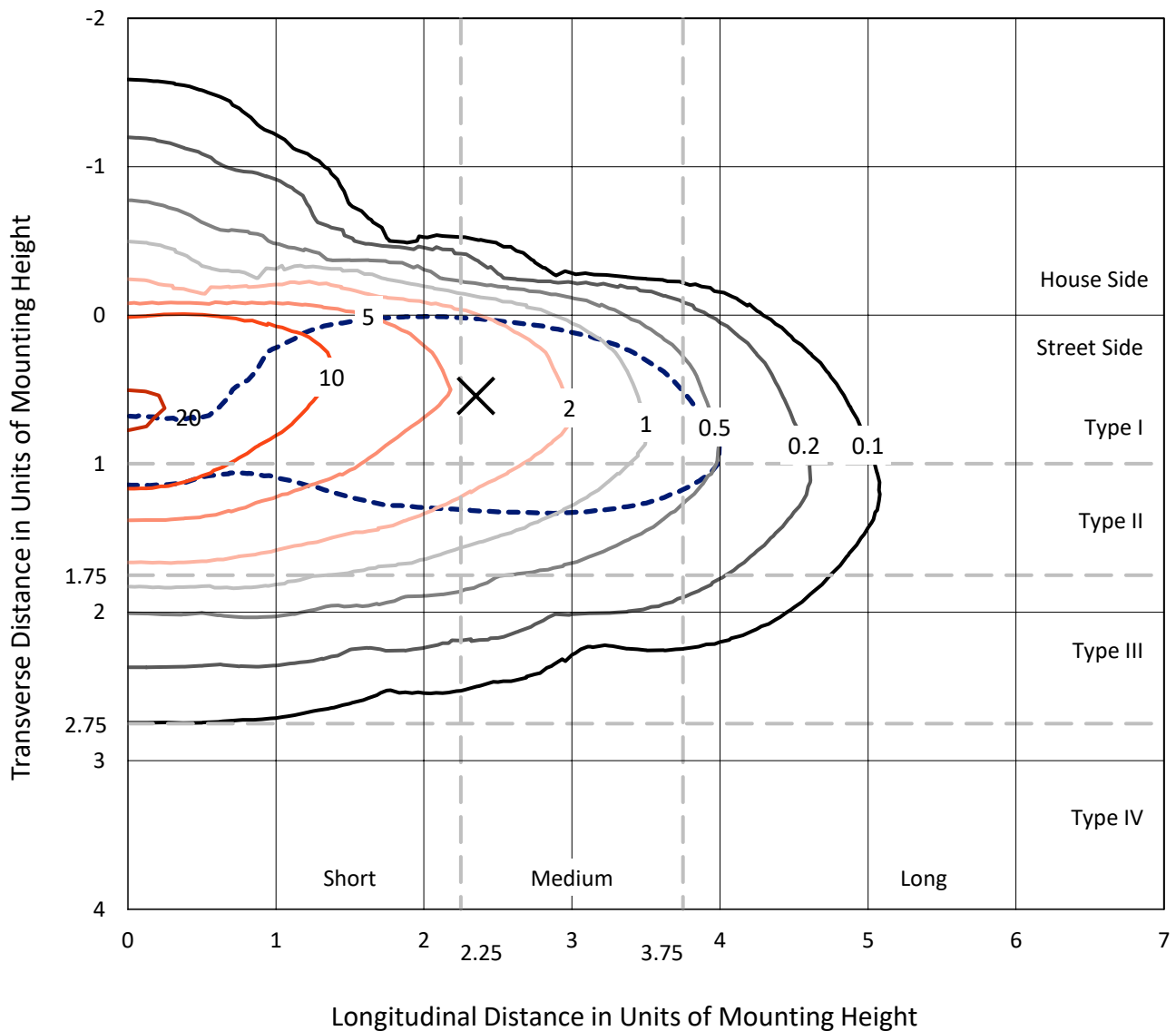
Input Watts (W): 440.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

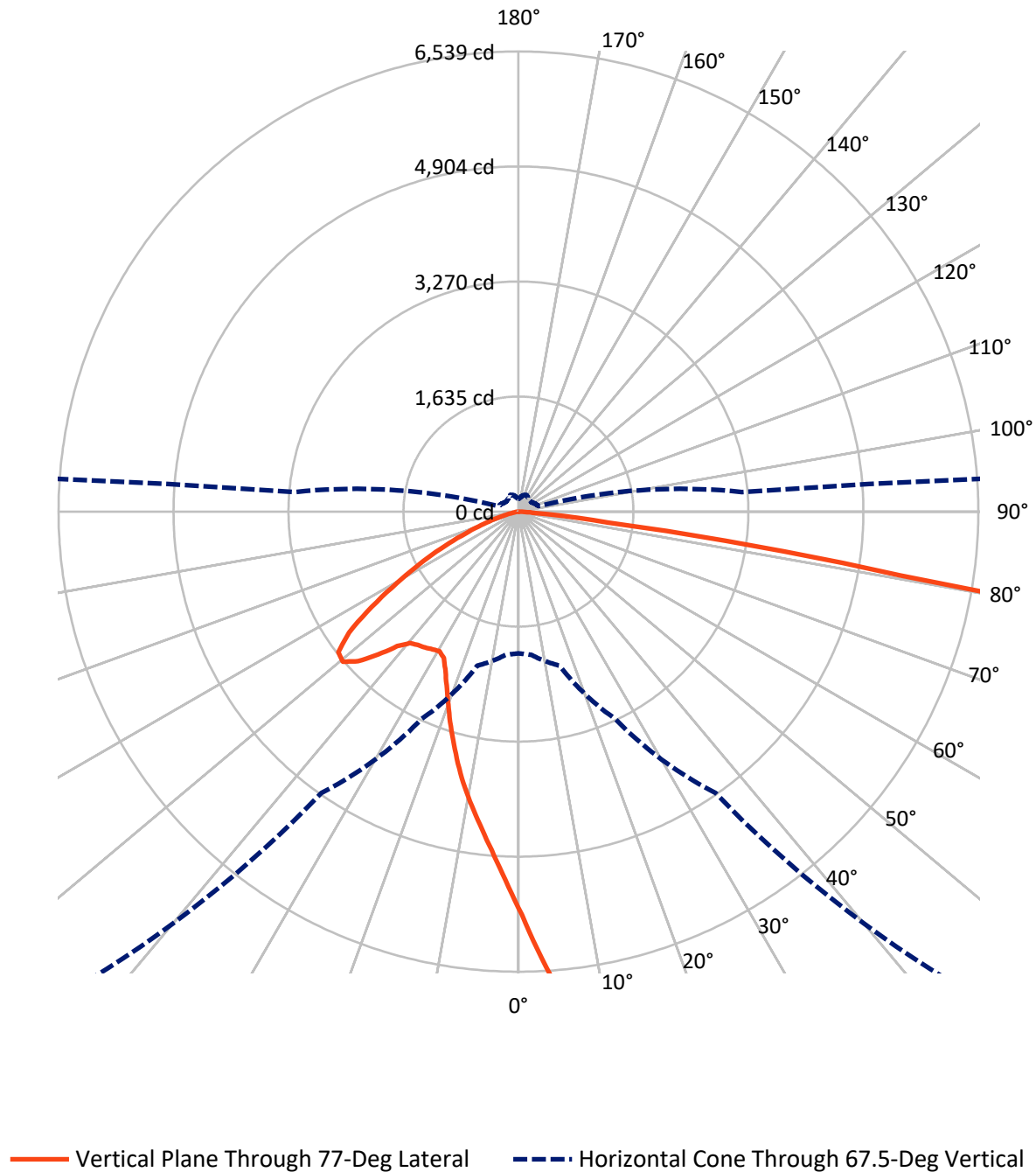
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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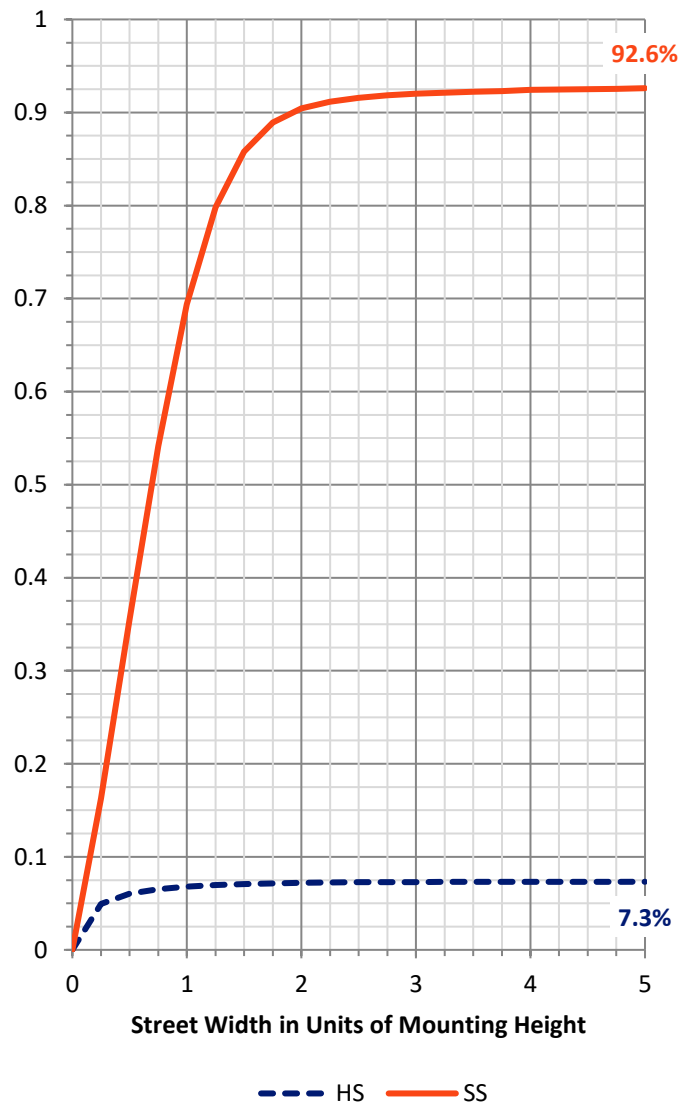
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3654.4	0.0	3654.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	46018.1	0.0	46018.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	49672.5	0.0	49672.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	584.6	1.2
10°-20°	2047.3	4.1
20°-30°	3950.8	8.0
30°-40°	6858.7	13.8
40°-50°	9958.5	20.0
50°-60°	11436.1	23.0
60°-70°	9928.7	20.0
70°-80°	4676.5	9.4
80°-90°	231.3	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°	49672.5	100.0
0°-180°	49672.5	100.0

Coefficient of Utilization



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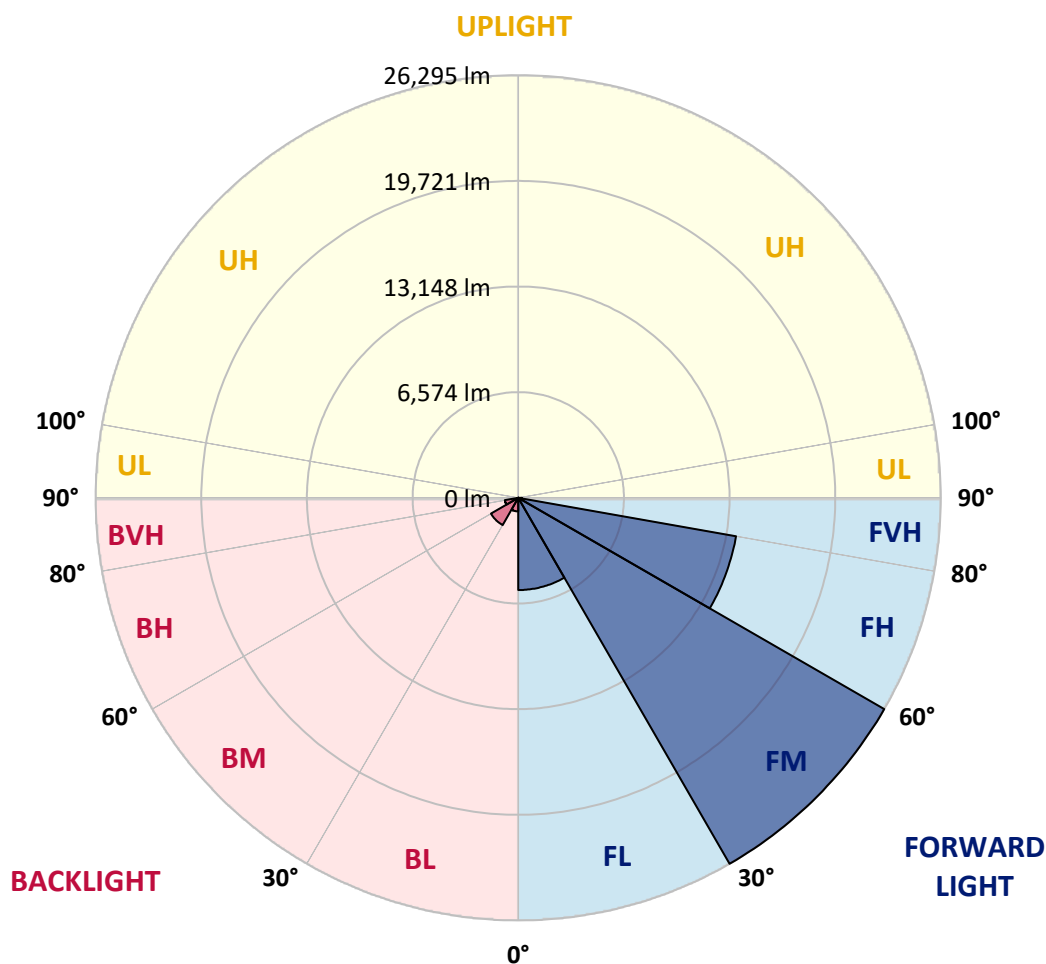
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5736.6	11.5			
FM	(30°-60°)	26295.3	52.9			
FH	(60°-80°)	13759.1	27.7			G5
FVH	(80°-90°)	227.0	0.5			G3/500
BL	(0°-30°)	846.1	1.7	B2/1000		
BM	(30°-60°)	1958.1	3.9	B2/2500		
BH	(60°-80°)	846.0	1.7	B2/1000		G2/1000
BVH	(80°-90°)	4.3	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-G5

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0
2.5°	7930.3	7979.7	7908.7	7773.0	7569.4	7436.8	7112.9	6807.5	6468.3	6360.3	6021.0
5°	9666.9	9710.1	9629.9	9481.9	9210.4	8951.3	8525.6	7887.2	7224.0	7011.1	6409.6
7.5°	10953.2	10977.9	10947.0	10811.3	10552.2	10259.1	9784.1	9028.4	8044.4	7810.0	6887.8
10°	11878.5	11958.7	11949.4	11897.1	11724.3	11486.8	10980.9	10120.3	8963.6	8661.4	7427.6
12.5°	12492.4	12581.8	12634.3	12751.4	12742.2	12591.1	12146.9	11237.0	9879.8	9525.0	8035.2
15°	12671.3	12766.9	12967.4	13238.8	13479.4	13556.5	13244.9	12332.0	10888.4	10435.0	8658.3
17.5°	12569.5	12717.5	12958.2	13386.9	13914.3	14262.9	14228.9	13390.0	11804.5	11286.3	9269.0
20°	12794.7	12936.5	13124.7	13485.5	14099.4	14731.7	14984.7	14401.7	12714.4	12171.6	9910.6
22.5°	14040.8	14016.1	14034.6	14093.2	14460.3	15086.5	15607.7	15320.9	13615.1	13059.9	10589.2
25°	16014.9	15903.8	15715.7	15398.0	15305.4	15607.7	16150.6	16135.1	14565.1	13969.8	11283.2
27.5°	18278.9	18260.4	17819.3	17054.4	16622.5	16505.4	16764.4	16927.9	15505.9	14870.5	11980.3
30°	20447.3	20496.7	19901.4	19050.0	18257.3	17797.7	17563.3	17680.5	16462.1	15842.2	12699.0
32.5°	22335.1	22387.5	21739.7	20743.4	19762.6	19207.4	18713.8	18423.9	17504.7	16829.2	13488.7
35°	23929.8	23982.2	23238.8	22137.6	21092.0	20589.3	20031.0	19238.2	18553.4	17924.2	14367.7
37.5°	25354.8	25339.4	24343.1	23232.6	22205.5	21807.6	21514.6	20240.7	19633.1	19025.3	15342.4
40°	26196.9	26261.7	25410.4	24185.8	23189.5	22899.5	22881.1	21483.8	20879.1	20290.1	16409.7
42.5°	26443.7	26557.9	25940.9	24935.4	24031.5	23717.0	24201.2	22828.6	22328.9	21755.2	17615.8
45°	25999.5	26110.5	25829.9	25132.8	24605.3	24401.8	25336.4	24222.8	23877.4	23309.8	18976.0
47.5°	24704.0	24842.8	24910.7	24762.6	24756.4	24963.1	26354.2	25691.0	25715.7	25135.9	20552.2
50°	22196.3	22430.7	23053.8	23578.2	24389.4	25407.3	27344.3	27282.6	27788.6	27288.9	22606.5
52.5°	17637.4	17970.5	20117.3	21551.6	23374.6	25324.0	28433.2	29836.6	31425.2	30694.1	25502.9
55°	14173.4	14173.4	15919.3	18602.8	21394.3	24775.0	28908.2	31496.1	33902.1	33729.4	27541.7
57.5°	11554.6	11693.4	12807.0	15179.0	18528.8	23467.1	29201.2	32538.7	35897.8	35771.3	29534.4
60°	7131.4	7430.6	9534.2	11875.4	15268.4	21138.3	29016.2	33593.7	38319.1	38420.9	31934.2
62.5°	4016.1	4127.1	5064.8	8544.2	11872.4	18007.5	27600.4	34182.7	41415.9	41847.8	34407.9
65°	2773.0	2828.5	3189.4	5317.7	8229.5	14336.9	24833.6	33815.7	44519.0	45391.9	36505.4
67.5°	2014.2	2042.0	2267.1	3248.0	4882.8	10394.8	20496.7	31965.0	46163.0	47622.0	36906.4
70°	1548.5	1566.9	1730.4	2134.5	2884.0	6415.8	14886.0	28285.2	44972.5	46715.2	34852.2
72.5°	1258.5	1276.9	1403.4	1579.3	1912.4	3793.9	9022.3	22970.5	39716.4	41598.0	29670.1
75°	1061.1	1085.8	1199.9	1314.0	1499.1	2436.7	4232.0	15996.4	29867.5	31101.3	20632.4
77.5°	589.2	542.8	974.7	1088.9	1264.6	1542.2	1980.3	9414.0	16727.4	17069.8	9154.9
80°	367.1	379.4	774.2	876.0	971.6	777.3	906.8	3624.3	5798.9	5509.0	1773.6
82.5°	21.6	49.3	595.3	632.3	666.2	333.1	342.3	1230.7	1397.3	1283.2	314.6
85°	0.0	0.0	271.4	219.0	231.3	95.6	98.7	286.9	188.2	203.6	61.7
87.5°	0.0	0.0	0.0	6.1	0.0	9.2	18.6	24.7	9.2	12.3	21.6
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°	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0	5728.0
2.5°	5805.1	5589.1	5151.1	4722.4	4373.9	4050.0	3818.6	3599.7	3488.6	3482.4	3476.3
5°	5980.9	5527.5	4651.4	3877.3	3254.2	2754.5	2430.6	2199.2	2082.1	2042.0	2035.8
7.5°	6227.7	5546.0	4213.5	3137.0	2402.8	1974.2	1789.0	1715.0	1690.3	1662.6	1656.4
10°	6539.2	5589.1	3821.7	2526.2	1893.9	1678.0	1603.9	1573.1	1554.6	1536.1	1529.9
12.5°	6887.8	5629.3	3433.0	2097.5	1665.6	1554.6	1502.1	1465.1	1440.4	1418.9	1412.8
15°	7227.1	5653.9	3029.0	1798.3	1548.5	1459.0	1403.4	1363.4	1329.4	1304.7	1301.6
17.5°	7563.3	5687.8	2649.6	1619.4	1452.8	1363.4	1307.8	1258.5	1230.7	1202.9	1199.9
20°	7936.5	5681.7	2291.8	1492.9	1357.2	1267.7	1209.1	1162.9	1135.1	1104.2	1101.2
22.5°	8282.0	5650.8	1977.2	1385.0	1258.5	1172.1	1107.3	1061.1	1033.3	1008.6	1005.5
25°	8679.9	5626.2	1715.0	1286.3	1165.9	1079.6	1008.6	965.4	934.6	913.1	909.9
27.5°	9062.3	5589.1	1523.8	1196.8	1076.5	993.2	925.4	876.0	848.3	832.8	832.8
30°	9438.7	5579.9	1452.8	1110.4	996.3	913.1	845.1	798.9	777.3	771.1	768.0
32.5°	9892.1	5604.6	1483.7	1079.6	922.3	839.0	774.2	740.3	718.7	718.7	718.7
35°	10376.4	5598.4	1529.9	1107.3	872.9	765.0	715.7	694.0	672.4	672.4	672.4
37.5°	10984.0	5607.7	1566.9	1153.6	854.4	703.3	675.5	647.8	635.4	635.4	635.4
40°	11890.8	5913.0	1548.5	1193.7	848.3	660.1	604.5	595.3	586.1	586.1	586.1
42.5°	13001.3	6576.2	1573.1	1196.8	845.1	629.2	555.2	573.7	552.2	549.1	545.9
45°	14216.6	7301.1	1730.4	1132.0	842.0	613.9	530.5	552.2	518.2	518.2	518.2
47.5°	15422.7	8019.8	1890.8	1039.5	832.8	610.7	508.9	496.6	487.4	490.5	490.5
50°	17085.2	8605.8	1952.5	913.1	811.2	604.5	468.8	471.9	465.8	471.9	471.9
52.5°	18895.9	8729.2	1878.5	771.1	749.6	586.1	441.1	453.5	450.4	456.5	456.5
55°	20024.8	8596.6	1551.5	641.5	653.9	512.0	413.3	438.0	438.0	438.0	438.0
57.5°	21190.7	8032.1	1101.2	521.3	542.8	419.5	388.7	422.6	419.5	416.5	416.5
60°	22029.7	7119.1	724.9	428.8	431.8	345.4	360.9	397.9	394.8	379.4	379.4
62.5°	22655.9	6110.4	465.8	364.0	330.0	311.5	330.0	360.9	348.6	314.6	308.4
65°	22585.0	4713.2	357.8	311.5	271.4	271.4	286.9	314.6	277.6	222.1	216.0
67.5°	21267.8	3189.4	296.1	262.2	228.3	225.2	237.5	262.2	237.5	188.2	181.9
70°	18914.3	2085.2	237.5	203.6	181.9	166.6	191.3	225.2	200.5	151.2	144.9
72.5°	15351.7	1270.8	178.9	148.0	132.6	107.9	151.2	185.1	160.4	111.0	104.9
75°	9932.1	647.8	123.4	95.6	70.9	64.8	111.0	138.8	111.0	67.9	58.6
77.5°	3800.2	271.4	67.9	43.2	37.0	30.9	61.7	83.3	46.2	15.4	12.3
80°	731.0	114.1	33.9	21.6	18.6	12.3	9.2	6.1	0.0	0.0	0.0
82.5°	126.5	37.0	12.3	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	43.2	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.4	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)