

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: P969502

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
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-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38327.8 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - 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

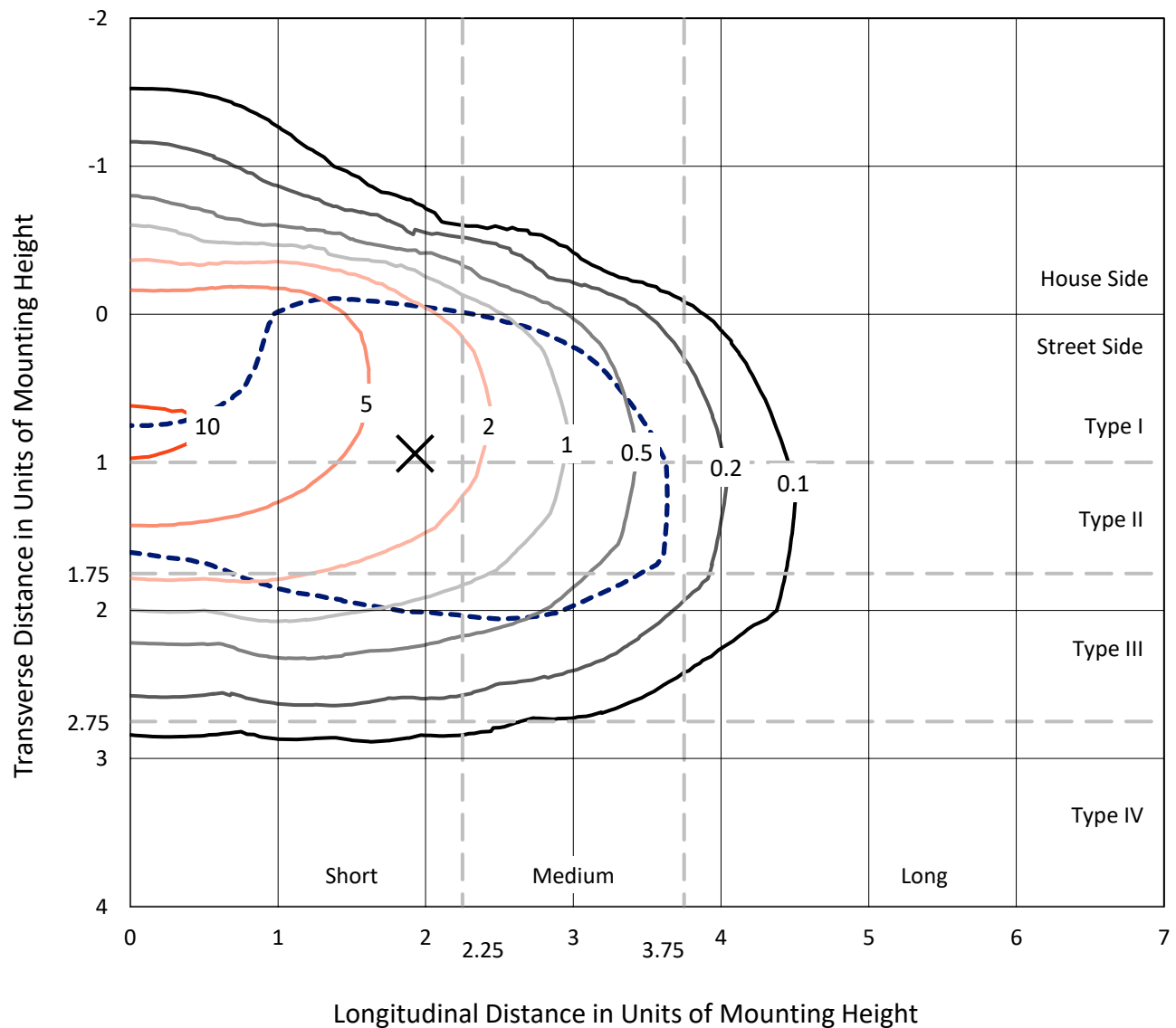


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

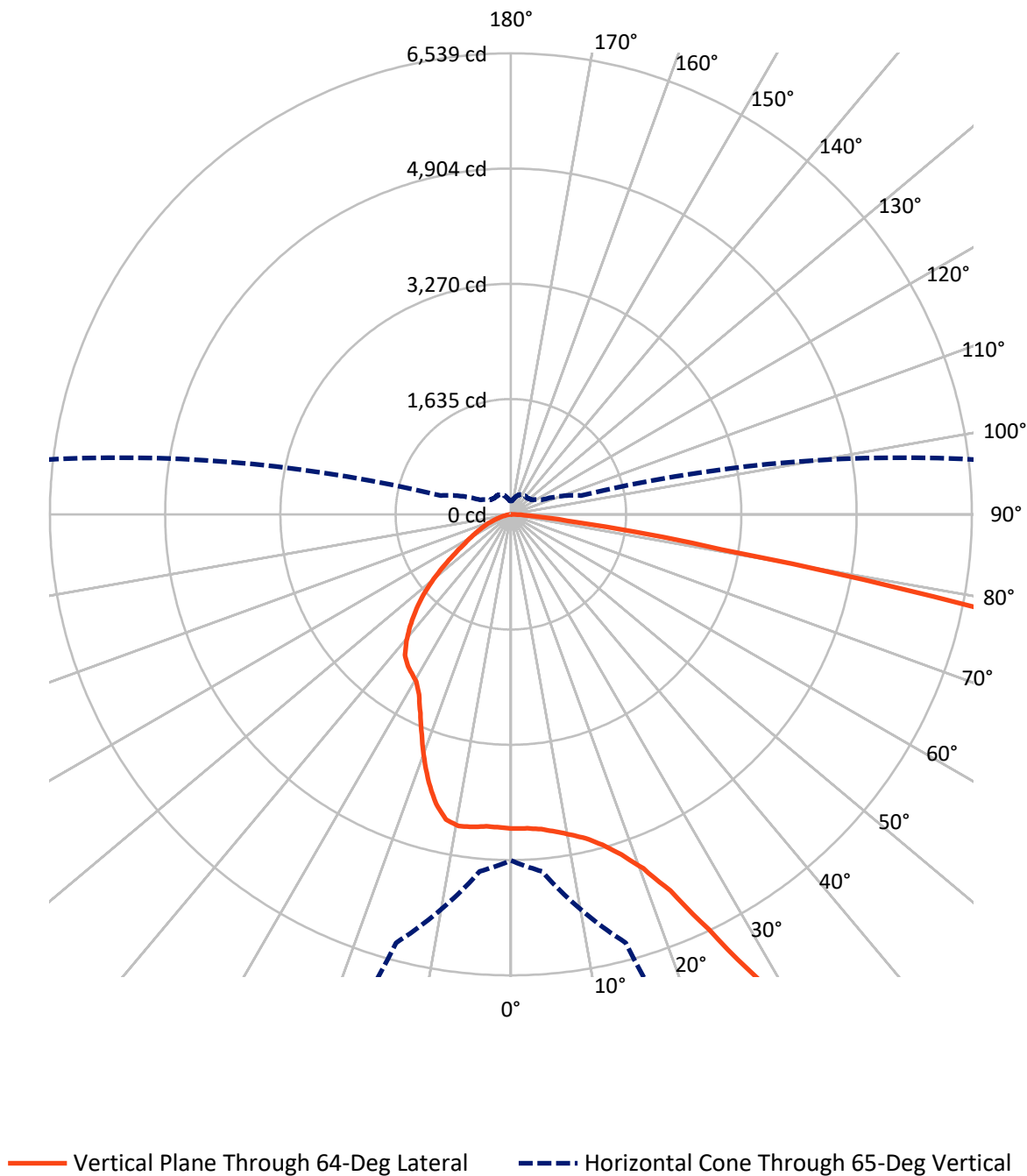


Based on 25 foot mounting height. Maximum calculated value = 11.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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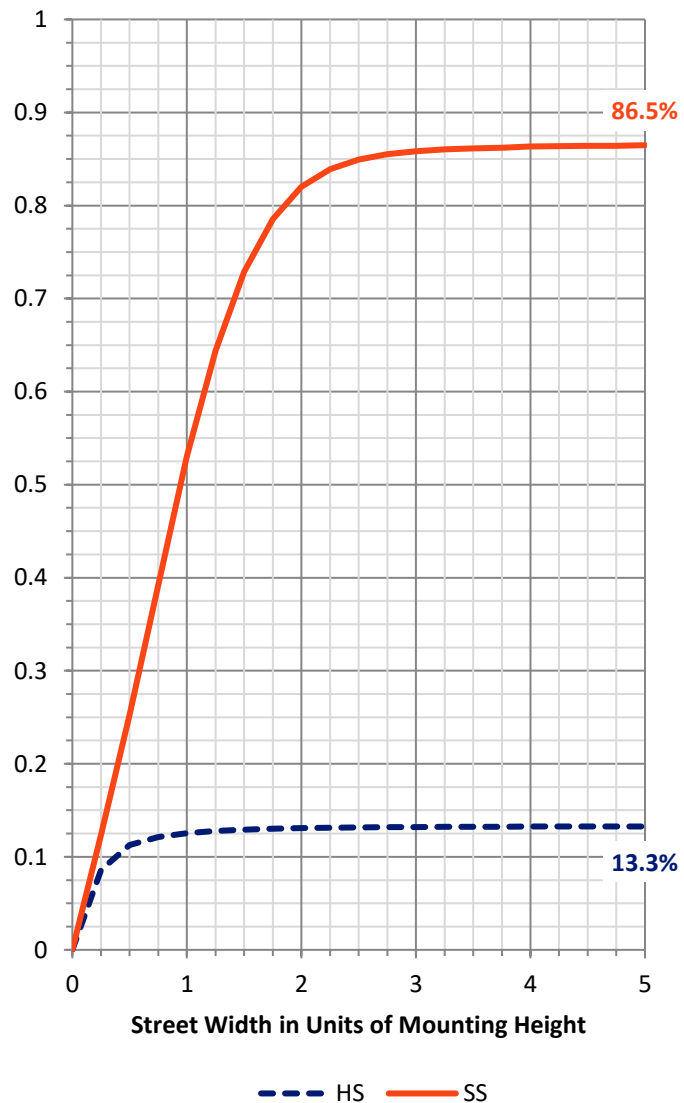
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5125.6	0.0	5125.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	33202.2	0.0	33202.2
	% Fixture	86.6	0.0	86.6
Total	Lumens	38327.8	0.0	38327.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.3	1.1
10°-20°	1115.5	2.9
20°-30°	2113.8	5.5
30°-40°	4277.4	11.2
40°-50°	7286.6	19.0
50°-60°	9909.2	25.9
60°-70°	9305.3	24.3
70°-80°	3728.1	9.7
80°-90°	180.6	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°	38327.8	100.0
0°-180°	38327.8	100.0

Coefficient of Utilization



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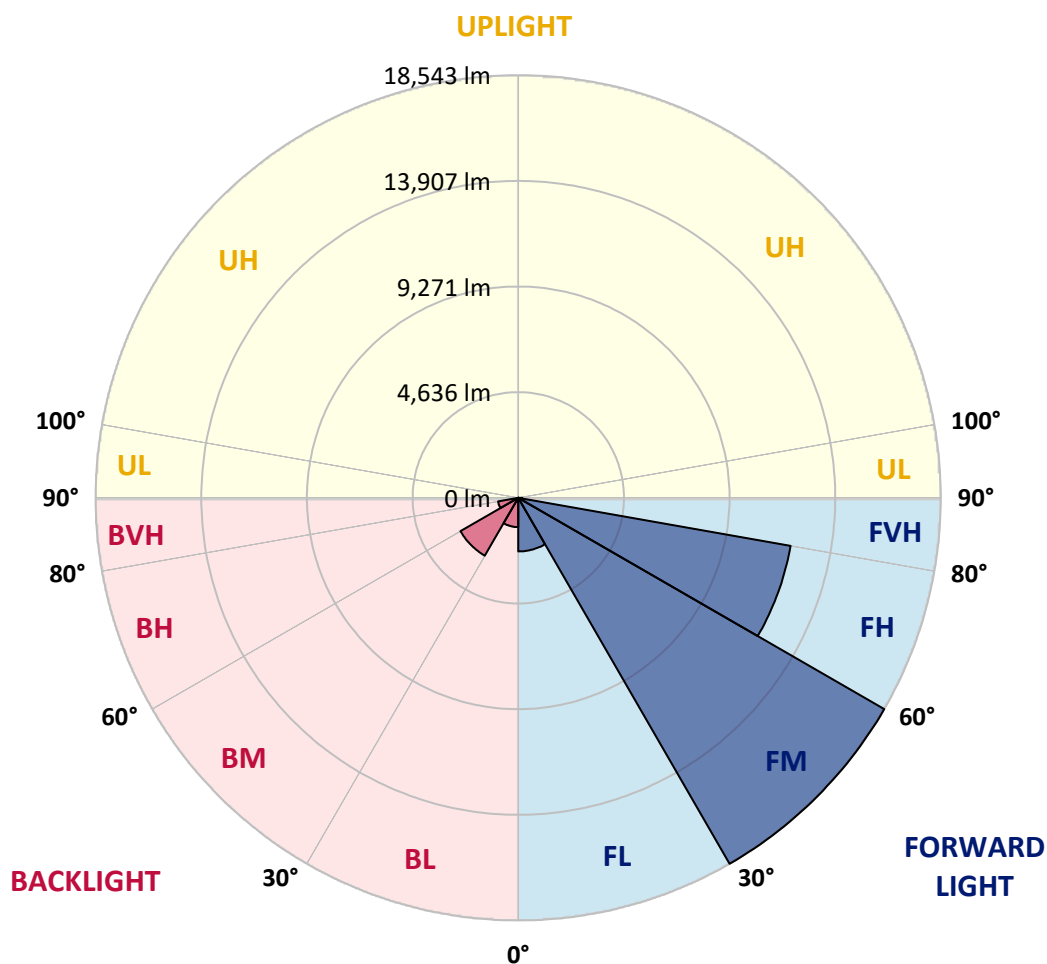
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2353.8	6.1			
FM	(30°-60°)	18543.0	48.4			
FH	(60°-80°)	12133.7	31.7			G5
FVH	(80°-90°)	171.8	0.4			G2/225
BL	(0°-30°)	1286.9	3.4	B3/2500		
BM	(30°-60°)	2930.3	7.6	B3/5000		
BH	(60°-80°)	899.6	2.3	B2/1000		G2/1000
BVH	(80°-90°)	8.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9
2.5°	4442.6	4473.3	4465.6	4457.9	4455.4	4460.5	4463.1	4460.5	4460.5	4460.5	4463.1
5°	4357.7	4383.4	4383.4	4401.3	4427.1	4457.9	4481.1	4486.2	4491.3	4499.0	4496.5
7.5°	4195.8	4216.4	4231.8	4291.0	4355.1	4437.3	4506.7	4542.7	4547.8	4576.1	4586.4
10°	4085.3	4111.1	4136.8	4198.4	4291.0	4414.3	4532.4	4619.8	4632.7	4699.4	4730.3
12.5°	4080.2	4105.9	4139.4	4206.1	4314.0	4445.1	4588.9	4714.9	4738.0	4835.6	4899.9
15°	4134.1	4165.0	4195.8	4278.0	4393.7	4552.9	4707.1	4863.9	4887.0	5025.8	5095.2
17.5°	4244.6	4285.7	4308.9	4391.1	4514.4	4691.7	4894.7	5074.6	5095.2	5257.0	5344.3
20°	4463.1	4511.8	4519.6	4586.4	4707.1	4897.2	5138.8	5362.4	5388.0	5573.0	5670.7
22.5°	4915.3	4984.7	4923.0	4956.4	5064.3	5254.5	5516.5	5799.1	5835.1	6045.9	6133.2
25°	5711.8	5809.4	5650.1	5593.6	5639.9	5837.7	6166.6	6523.7	6564.8	6734.5	6778.1
27.5°	7276.6	7150.7	6909.1	6672.7	6534.0	6647.0	7017.0	7459.0	7510.4	7674.8	7623.4
30°	8995.5	8885.0	8558.8	8034.6	7705.6	7687.7	8029.4	8522.8	8581.8	8738.5	8581.8
32.5°	10717.0	10611.6	10257.1	9612.1	9041.7	8759.1	8995.5	9542.8	9573.6	9673.8	9442.6
35°	12410.3	12302.4	11947.7	11287.4	10586.0	9943.6	9897.4	10514.0	10524.3	10629.7	10285.4
37.5°	14113.7	14023.8	13646.1	12998.6	12307.5	11421.1	10991.9	11433.9	11446.7	11549.5	11192.4
40°	15329.1	15367.6	15108.1	14607.1	14013.6	13044.9	12220.2	12412.9	12335.8	12507.9	12294.7
42.5°	16372.2	16449.4	16223.3	15971.4	15627.1	14774.1	13741.2	13707.8	13584.4	13677.0	13456.0
45°	17274.1	17338.4	17135.4	17076.3	17068.6	16469.9	15403.6	15203.2	15031.0	15013.1	14748.4
47.5°	17605.6	17728.9	17816.2	18014.2	18399.6	18147.7	17122.5	16811.6	16618.9	16477.6	16058.8
50°	17731.5	17862.6	18160.5	18736.1	19648.2	19756.2	18833.8	18484.3	18248.0	17991.0	17374.4
52.5°	17561.9	17795.7	18196.5	19165.2	20488.4	21046.0	20475.6	20169.8	19900.1	19481.3	18566.5
55°	16562.4	16796.3	17615.9	19160.1	20907.2	21950.5	22027.6	21891.3	21588.1	20927.8	19530.0
57.5°	14455.5	14802.3	16099.9	18507.4	20899.5	22729.0	23548.7	23646.2	23307.1	22361.6	20288.0
60°	11536.7	12006.8	13589.6	17060.9	20254.6	23150.3	24882.2	25370.4	25010.6	23774.8	20902.1
62.5°	8049.9	8594.6	10092.7	14794.6	18779.8	22847.1	25855.9	26757.8	26485.5	25038.9	21138.6
65°	4910.2	5084.8	6292.5	11641.9	16272.1	21577.9	26156.6	27508.1	27418.1	25812.3	20789.0
67.5°	3270.9	3417.4	3764.2	7983.1	12631.2	19041.9	25437.1	27377.0	27402.8	25686.4	19509.5
70°	1970.8	2096.6	2322.8	4642.9	8186.2	15072.1	23209.5	25706.9	25855.9	24003.4	17084.0
72.5°	811.9	896.8	1102.3	2104.3	4239.5	9565.9	18481.8	22071.2	22418.1	20182.7	13111.7
75°	459.9	503.6	647.5	1056.1	1839.7	4457.9	11194.9	15668.3	16179.5	13910.8	7888.1
77.5°	305.8	326.4	418.8	683.5	1035.5	1521.1	4784.3	8163.0	9139.4	7597.7	3414.8
80°	205.5	223.6	287.8	457.4	673.2	652.6	1523.7	3024.2	3720.5	2610.5	832.5
82.5°	138.8	141.3	205.5	300.6	426.5	316.0	449.7	940.4	1181.9	755.4	316.0
85°	79.6	77.1	151.6	174.8	190.1	131.0	136.2	282.6	370.0	318.6	179.9
87.5°	10.2	15.4	59.1	46.2	25.7	28.3	28.3	48.8	72.0	77.1	38.5
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°	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9	4457.9
2.5°	4463.1	4460.5	4452.8	4445.1	4427.1	4416.8	4422.0	4416.8	4414.3	4416.8	4427.1
5°	4496.5	4488.8	4468.2	4442.6	4406.6	4362.8	4334.6	4293.5	4255.0	4231.8	4236.9
7.5°	4586.4	4578.7	4550.4	4478.4	4362.8	4180.5	4013.4	3866.9	3756.5	3692.3	3694.8
10°	4730.3	4717.5	4673.8	4514.4	4211.2	3813.0	3481.5	3206.6	3026.7	2942.0	2934.3
12.5°	4899.9	4884.4	4807.4	4481.1	3923.5	3301.7	2844.4	2538.6	2371.5	2297.0	2289.3
15°	5100.3	5079.7	4928.1	4321.7	3504.7	2736.4	2317.6	2089.0	1981.0	1914.2	1916.7
17.5°	5349.5	5313.5	5018.1	4082.8	3049.9	2304.7	1993.8	1821.7	1726.6	1662.4	1657.2
20°	5673.3	5614.1	5090.0	3797.6	2631.1	2032.4	1775.5	1631.6	1559.6	1503.1	1492.8
22.5°	6125.5	6040.6	5177.4	3489.3	2335.6	1844.8	1613.6	1508.3	1449.1	1384.9	1374.6
25°	6685.6	6585.4	5285.3	3204.0	2132.6	1682.9	1495.4	1408.0	1338.6	1264.1	1256.4
27.5°	7469.3	7289.4	5413.7	2970.2	1957.9	1544.3	1387.4	1289.9	1210.2	1148.5	1135.7
30°	8342.9	8047.4	5526.8	2828.9	1798.6	1415.7	1246.2	1148.5	1074.0	1030.3	1022.6
32.5°	9170.3	8769.4	5601.3	2767.3	1654.7	1269.3	1092.0	986.7	930.1	917.3	925.0
35°	9951.3	9422.0	5593.6	2708.2	1526.2	1122.8	940.4	832.5	788.8	796.5	796.5
37.5°	10850.6	10118.3	5539.6	2615.7	1420.9	989.2	809.3	714.3	675.8	678.3	688.6
40°	11896.4	10922.6	5506.2	2440.9	1305.2	865.9	701.4	624.3	596.1	585.8	583.2
42.5°	13011.5	11701.1	5511.4	2243.1	1161.3	755.4	626.9	562.7	537.0	529.3	526.7
45°	14131.8	12443.6	5519.1	2037.5	1009.7	670.7	573.0	519.1	503.6	493.3	493.3
47.5°	15185.2	13075.7	5375.2	1816.6	860.8	606.4	529.3	493.3	480.5	467.6	467.6
50°	16166.7	13497.1	5028.3	1559.6	742.5	555.0	495.9	470.2	457.4	444.5	444.5
52.5°	16929.8	13563.9	4455.4	1295.0	660.3	516.5	475.3	452.2	436.8	423.9	421.4
55°	17269.0	13145.1	3640.9	1048.3	596.1	483.1	454.8	431.6	413.7	400.9	398.2
57.5°	17181.7	12263.8	2839.1	842.8	534.4	449.7	429.1	413.7	393.1	372.6	370.0
60°	16752.5	11084.5	2140.3	701.4	478.0	413.7	400.9	388.0	359.7	328.9	323.7
62.5°	16010.0	9601.9	1526.2	580.7	416.3	372.6	367.5	357.1	316.0	259.5	254.4
65°	14874.3	7800.8	1027.8	483.1	357.1	326.4	328.9	310.9	257.0	192.7	187.6
67.5°	13214.5	5704.1	657.7	395.6	298.1	272.3	274.9	264.7	218.4	164.4	156.7
70°	11099.8	3777.0	429.1	300.6	238.9	210.7	226.1	228.7	185.0	133.7	128.4
72.5°	8137.3	2230.3	300.6	223.6	174.8	146.5	185.0	190.1	149.0	100.2	95.0
75°	4637.8	1058.6	226.1	161.8	107.9	102.8	143.9	143.9	102.8	66.8	61.7
77.5°	1947.6	442.0	159.3	105.4	61.7	59.1	97.7	89.9	51.4	30.9	30.9
80°	562.7	197.8	84.8	51.4	25.7	23.2	38.5	28.3	12.8	5.1	5.1
82.5°	221.0	87.3	33.4	20.6	10.2	10.2	5.1	0.0	0.0	0.0	0.0
85°	131.0	36.0	15.4	7.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	33.4	7.7	5.1	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)