

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: P965132

Luminaire Tested: **NAV-SB3D-740-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27564.3 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 218.1
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

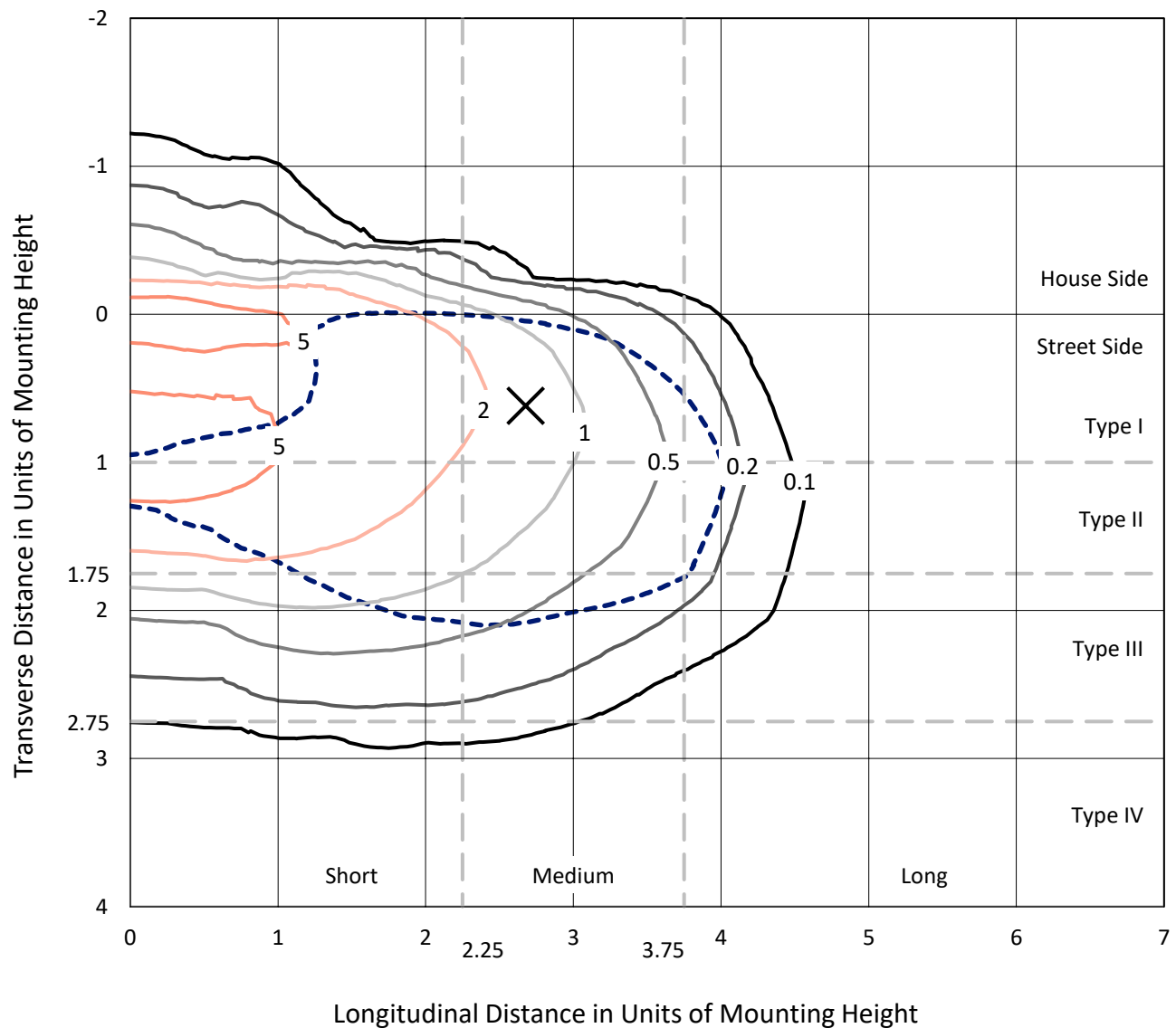


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Iso-Footcandle Lines of Horizontal Illumination

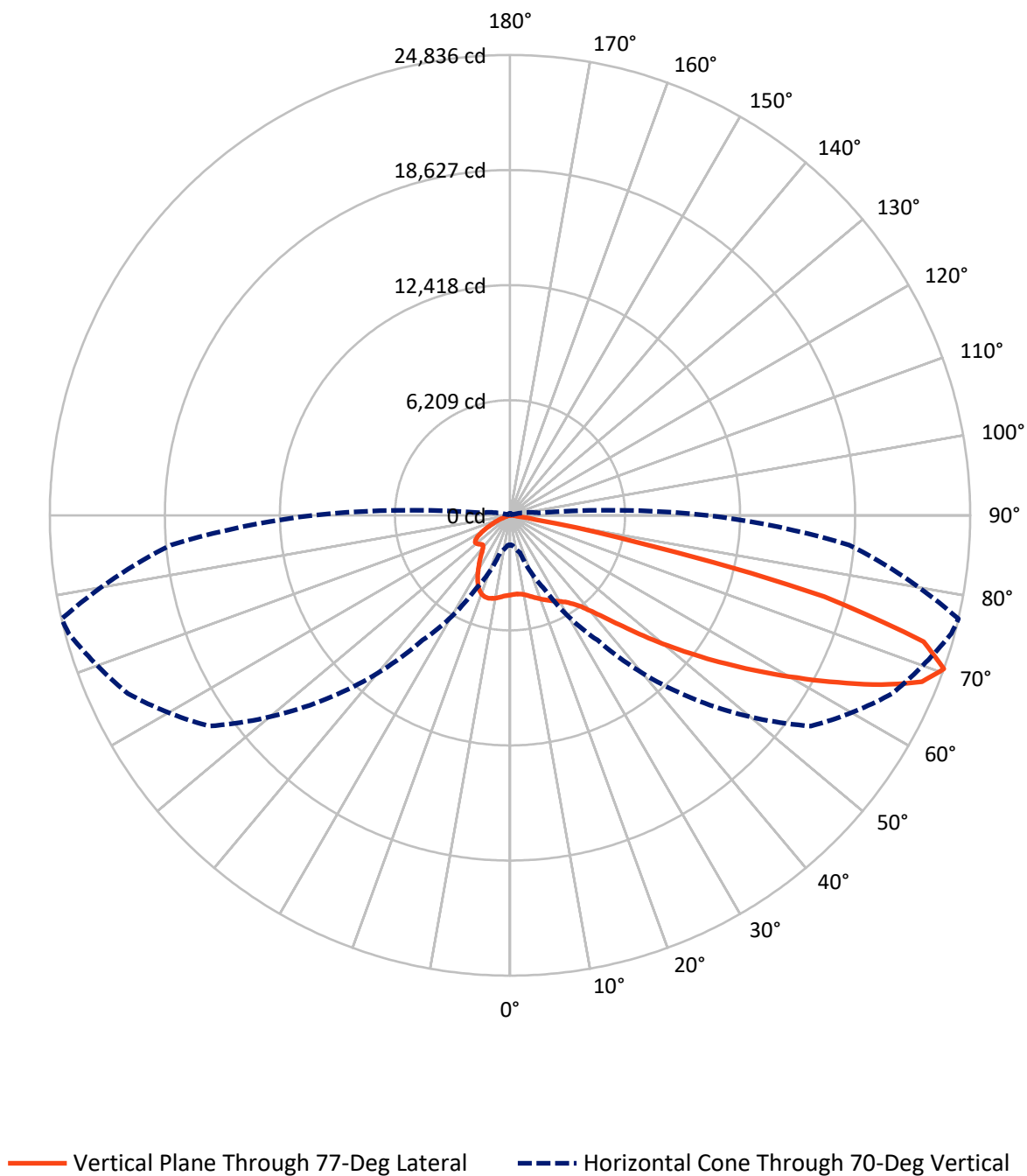
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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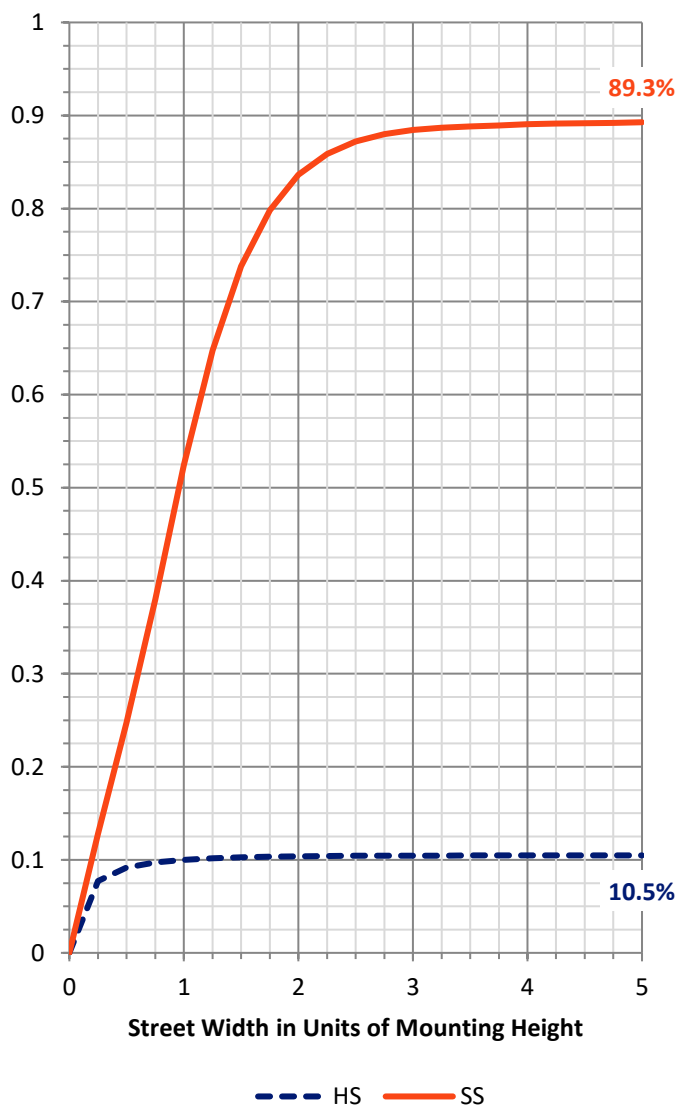
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2905.7	0.0	2905.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	24658.6	0.0	24658.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	27564.3	0.0	27564.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.6	1.3
10°-20°	879.6	3.2
20°-30°	1360.6	4.9
30°-40°	2468.8	9.0
40°-50°	4660.2	16.9
50°-60°	6733.6	24.4
60°-70°	7167.7	26.0
70°-80°	3798.4	13.8
80°-90°	124.7	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°	27564.3	100.0
0°-180°	27564.3	100.0

Coefficient of Utilization



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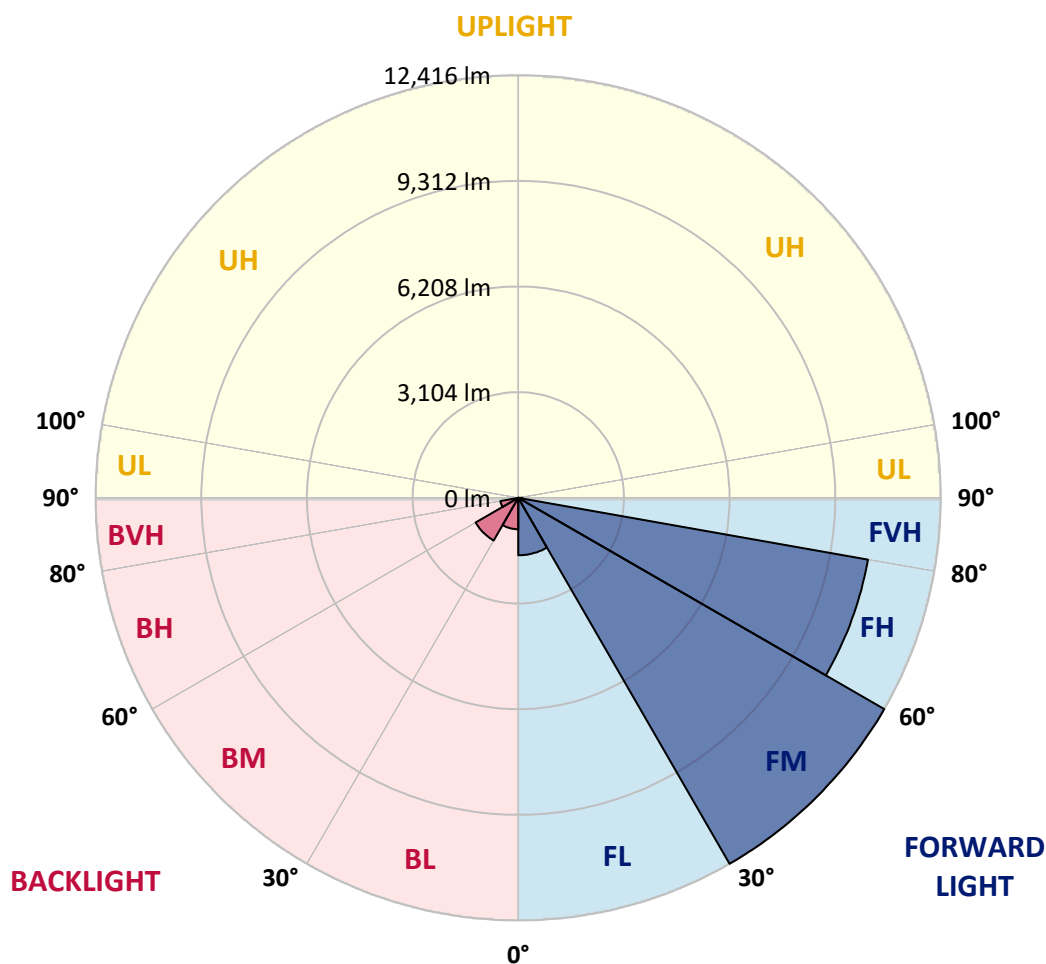
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1687.6	6.1			
FM	(30°-60°)	12416.2	45.0			
FH	(60°-80°)	10433.5	37.9			G4/12000
FVH	(80°-90°)	121.4	0.4			G2/225
BL	(0°-30°)	923.2	3.3	B2/1000		
BM	(30°-60°)	1446.4	5.2	B2/2500		
BH	(60°-80°)	532.7	1.9	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6
2.5°	4036.7	4073.2	4068.0	4092.4	4101.1	4135.9	4170.7	4217.7	4269.9	4268.2	4303.1
5°	3808.7	3845.2	3853.9	3887.0	3928.7	3982.7	4054.1	4148.1	4245.5	4261.2	4330.8
7.5°	3538.8	3577.1	3599.8	3665.9	3742.5	3853.9	3970.5	4108.1	4269.9	4292.6	4426.6
10°	3269.0	3303.9	3333.4	3427.4	3549.3	3714.7	3904.4	4102.9	4320.4	4353.5	4543.2
12.5°	3102.0	3135.0	3168.1	3249.9	3401.4	3603.3	3860.9	4127.2	4404.0	4451.0	4701.7
15°	3042.7	3072.3	3098.5	3171.6	3312.6	3542.3	3852.2	4177.7	4510.2	4572.8	4893.1
17.5°	3051.4	3067.1	3084.5	3140.2	3277.7	3514.5	3867.8	4264.7	4635.5	4691.2	5084.6
20°	3102.0	3110.7	3112.4	3150.6	3272.5	3511.0	3899.2	4348.3	4753.8	4828.7	5274.3
22.5°	3166.3	3169.8	3166.3	3192.5	3305.6	3537.1	3940.9	4449.2	4886.2	4955.8	5465.8
25°	3467.5	3401.4	3317.8	3267.3	3361.3	3587.6	4003.6	4585.0	5030.6	5098.6	5652.1
27.5°	4402.3	4212.5	3913.1	3577.1	3476.2	3660.7	4090.7	4722.5	5176.9	5237.8	5852.2
30°	5920.1	5671.2	5162.9	4405.8	3845.2	3813.9	4203.8	4860.0	5331.7	5398.0	6066.4
32.5°	7441.5	7380.6	6794.0	5746.0	4675.5	4155.0	4391.8	5046.3	5537.2	5589.4	6355.3
35°	8980.2	8856.7	8376.3	7340.5	5954.9	4849.6	4705.2	5290.0	5806.9	5866.2	6776.6
37.5°	10158.8	10083.8	9786.2	8933.3	7472.9	5921.8	5241.2	5667.7	6198.7	6264.8	7316.1
40°	11199.7	11164.8	11063.8	10501.6	9170.1	7324.9	6075.1	6252.6	6741.7	6820.0	7977.7
42.5°	12017.8	12099.6	12157.0	12000.4	10919.4	8926.3	7196.0	7074.2	7498.9	7579.1	8820.1
45°	12855.0	12882.9	13114.5	13340.8	12656.6	10600.9	8459.8	8036.8	8440.7	8539.9	9829.8
47.5°	13393.0	13504.4	13911.7	14310.3	14117.1	12261.5	9817.6	9173.5	9532.1	9718.3	10961.2
50°	13433.0	13643.6	14204.1	14898.7	15180.7	13842.0	11293.7	10468.5	10849.8	11055.2	12169.2
52.5°	12766.3	13093.6	13962.1	14978.7	15755.1	15180.7	12820.3	11763.6	12252.7	12520.9	13422.6
55°	9787.9	10216.2	13051.7	14543.5	15777.7	16195.5	14306.8	13112.7	13816.0	14118.9	14776.8
57.5°	8527.7	8743.6	10261.5	13788.1	15358.2	16604.6	15650.6	14397.4	15516.7	15892.6	16056.2
60°	7095.0	7378.9	8606.0	12552.2	14789.0	16644.6	16837.8	16054.5	17360.0	17783.0	17229.4
62.5°	4821.7	5129.8	6350.1	10428.6	14010.9	16625.4	17810.8	17760.4	19408.8	19863.2	18223.4
65°	2987.1	3180.3	3984.5	8515.5	12923.0	16646.3	18829.1	19831.8	21570.8	22032.1	18992.8
67.5°	2360.4	2449.1	2868.7	6538.1	11048.3	16176.3	19845.7	21779.6	23605.6	23971.2	19227.8
70°	1585.8	1639.7	2087.1	4383.1	8219.6	14007.4	19826.6	22758.0	24653.6	24836.4	18371.4
72.5°	835.6	877.3	1220.3	2029.7	4964.5	9956.8	16712.5	21588.1	23610.9	23335.9	15702.9
75°	417.8	487.4	821.6	1030.5	2120.2	5552.8	10378.0	17020.5	18583.8	17518.4	10075.1
77.5°	316.8	382.9	678.9	678.9	738.1	1869.5	4395.3	9283.1	8562.5	7129.9	2957.4
80°	201.9	261.1	593.6	513.5	308.1	475.2	1145.3	2600.6	1819.1	1383.9	537.9
82.5°	118.4	170.6	494.4	339.5	172.3	175.8	323.8	553.5	471.7	367.3	165.3
85°	47.0	111.4	339.5	134.1	67.9	43.6	97.5	118.4	97.5	73.1	41.8
87.5°	0.0	26.1	59.1	0.0	5.2	3.5	7.0	8.7	8.7	7.0	13.9
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°	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6	4299.6
2.5°	4318.6	4322.1	4332.6	4334.3	4310.0	4278.7	4266.5	4261.2	4240.3	4238.6	4242.1
5°	4370.9	4386.6	4370.9	4325.6	4217.7	4066.3	3951.4	3857.4	3772.1	3746.0	3730.3
7.5°	4475.4	4491.0	4444.0	4266.5	3994.9	3693.8	3422.3	3230.7	3058.4	2994.0	2967.9
10°	4625.0	4645.9	4498.0	4139.4	3658.9	3175.0	2715.5	2391.7	2139.3	2036.6	1993.1
12.5°	4813.0	4821.7	4527.5	3946.1	3222.1	2530.9	1880.0	1533.6	1309.0	1225.5	1199.4
15°	5020.1	5008.0	4531.0	3683.3	2626.8	1789.4	1227.2	1007.9	917.4	889.5	889.5
17.5°	5237.8	5187.3	4461.4	3303.9	1973.9	1223.7	910.4	858.1	842.6	835.6	833.8
20°	5451.9	5338.7	4334.3	2807.8	1417.0	913.9	826.9	811.2	802.5	799.0	795.5
22.5°	5646.8	5453.6	4116.8	2231.6	1028.8	807.7	781.6	767.6	751.9	745.0	743.3
25°	5836.6	5519.7	3810.4	1693.7	823.4	755.4	734.6	708.5	687.6	678.9	675.4
27.5°	6021.1	5561.5	3427.4	1253.3	734.6	706.7	668.4	631.9	616.2	612.7	609.3
30°	6217.8	5575.5	2992.3	934.8	680.6	645.8	590.1	548.3	539.7	541.4	541.4
32.5°	6458.0	5596.4	2553.6	765.9	635.4	572.7	506.6	463.0	456.0	463.0	461.2
35°	6745.2	5638.1	2130.7	705.0	595.3	497.8	426.5	389.9	382.9	388.2	386.4
37.5°	7135.1	5706.0	1735.5	692.8	562.2	435.2	358.5	329.0	329.0	330.8	329.0
40°	7653.9	5887.1	1382.1	684.1	544.9	388.2	302.9	290.7	295.9	299.4	299.4
42.5°	8285.7	6271.8	1143.6	673.6	525.7	367.3	275.0	269.8	278.5	282.0	282.0
45°	8994.2	6759.2	1060.1	656.2	508.3	381.2	262.8	255.8	266.3	268.0	269.8
47.5°	9727.0	7236.1	1049.6	637.1	490.9	402.1	259.3	243.7	255.8	257.6	259.3
50°	10468.5	7547.7	1060.1	607.5	463.0	402.1	261.1	231.5	242.0	247.2	248.9
52.5°	11215.3	7690.4	1053.1	543.1	414.3	377.7	261.1	221.1	231.5	235.0	235.0
55°	11939.5	7662.6	946.9	447.3	351.6	334.3	254.1	212.4	219.4	221.1	221.1
57.5°	12512.2	7274.4	750.2	348.1	285.5	278.5	231.5	201.9	207.2	205.4	205.4
60°	12811.6	6421.4	536.2	268.0	224.6	219.4	203.7	188.0	191.5	182.8	181.0
62.5°	12815.1	5293.5	358.5	212.4	179.3	174.0	174.0	168.8	165.3	148.0	142.8
65°	12541.8	4041.9	238.5	168.8	144.5	135.8	146.3	144.5	132.3	107.9	104.4
67.5°	11922.1	2649.3	181.0	132.3	111.4	106.2	116.6	121.9	113.2	90.5	88.8
70°	10647.9	1542.2	149.6	102.7	83.5	78.3	94.0	104.4	94.0	73.1	69.6
72.5°	8844.5	832.1	121.9	76.6	57.4	52.2	74.8	85.3	74.8	53.9	52.2
75°	5739.1	445.7	94.0	50.4	29.6	33.1	55.7	62.6	52.2	34.8	31.4
77.5°	1927.0	196.7	59.1	24.4	13.9	13.9	33.1	38.3	24.4	12.2	10.5
80°	430.0	81.8	24.4	10.5	5.2	5.2	7.0	7.0	3.5	0.0	0.0
82.5°	141.0	33.1	10.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	53.9	12.2	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.9	1.7	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)