

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: P967767

Luminaire Tested: **NAV-SB5A-740-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967767
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-SB5A-740-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA 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: 20458 lumens
Efficiency: N/A
Efficacy: 144.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 141.7
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

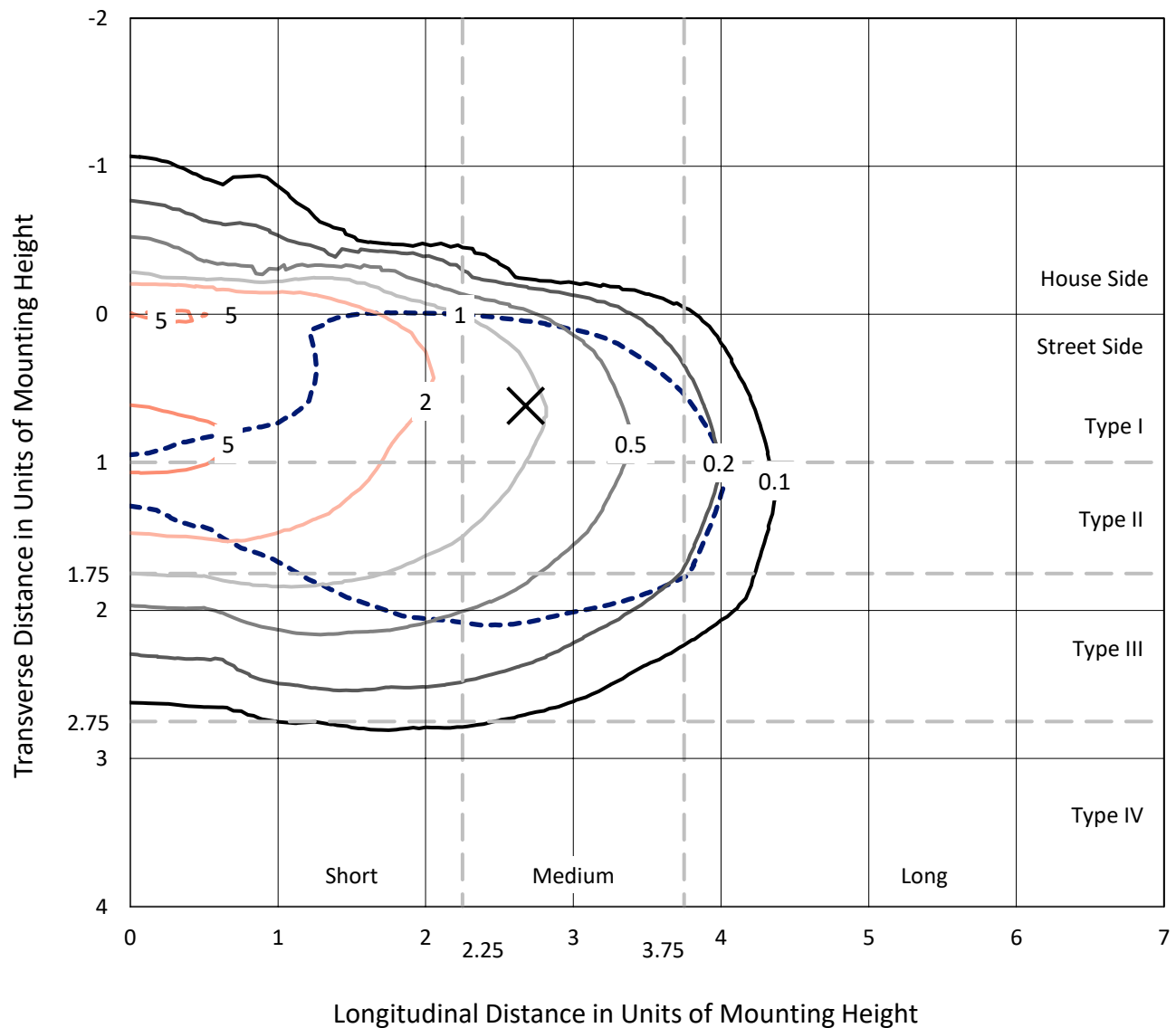


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Iso-Footcandle Lines of Horizontal Illumination

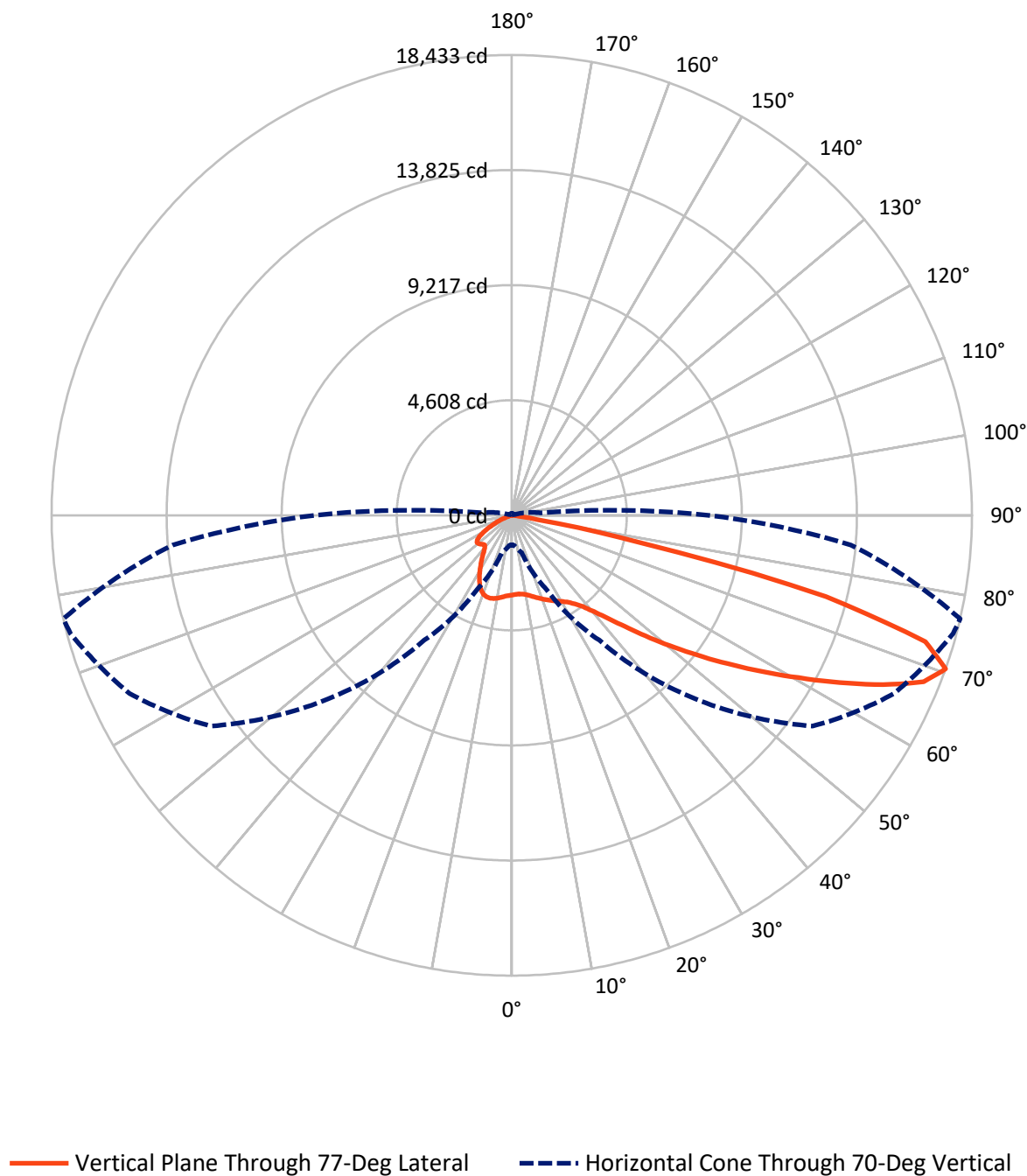
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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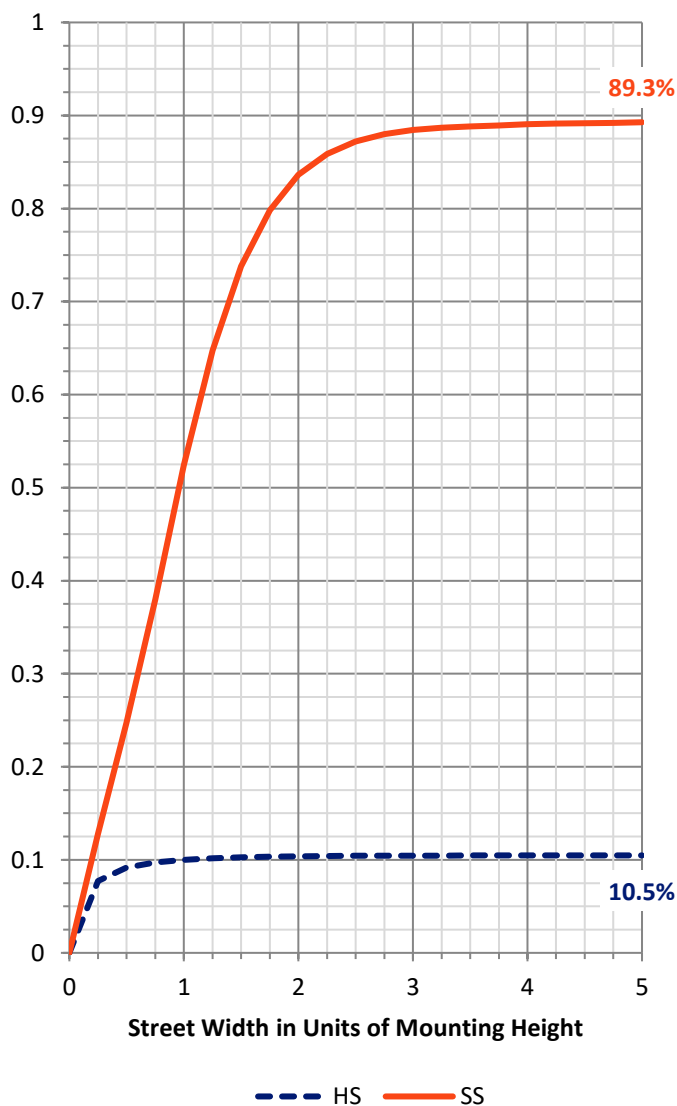
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2156.6	0.0	2156.6
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	18301.4	0.0	18301.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	20458.0	0.0	20458.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.0	1.3
10°-20°	652.9	3.2
20°-30°	1009.8	4.9
30°-40°	1832.3	9.0
40°-50°	3458.8	16.9
50°-60°	4997.6	24.4
60°-70°	5319.8	26.0
70°-80°	2819.1	13.8
80°-90°	92.6	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°	20458.0	100.0
0°-180°	20458.0	100.0

Coefficient of Utilization



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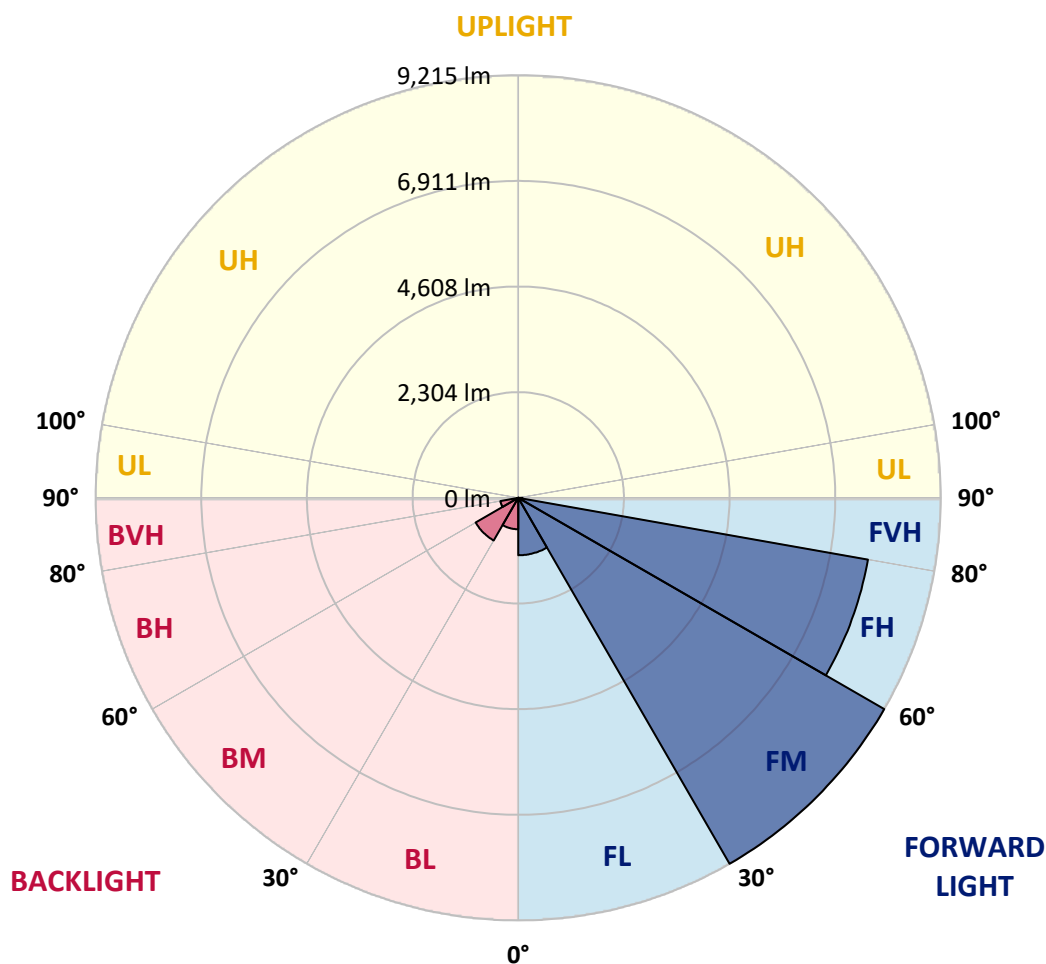
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1252.5	6.1			
FM	(30°-60°)	9215.2	45.0			
FH	(60°-80°)	7743.6	37.9			G4/12000
FVH	(80°-90°)	90.1	0.4			G1/100
BL	(0°-30°)	685.2	3.3	B2/1000		
BM	(30°-60°)	1073.5	5.2	B2/2500		
BH	(60°-80°)	395.3	1.9	B1/500		G1/500
BVH	(80°-90°)	2.5	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°	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0
2.5°	2996.0	3023.1	3019.2	3037.4	3043.8	3069.7	3095.5	3130.4	3169.1	3167.9	3193.7
5°	2826.7	2853.9	2860.4	2884.9	2915.9	2955.9	3008.9	3078.7	3151.1	3162.6	3214.3
7.5°	2626.5	2655.0	2671.8	2720.8	2777.6	2860.4	2946.9	3049.0	3169.1	3185.9	3285.4
10°	2426.3	2452.1	2474.0	2543.8	2634.2	2756.9	2897.8	3045.1	3206.6	3231.1	3371.9
12.5°	2302.3	2326.8	2351.4	2412.0	2524.5	2674.3	2865.5	3063.2	3268.6	3303.5	3489.5
15°	2258.3	2280.2	2299.7	2353.9	2458.6	2629.1	2859.0	3100.6	3347.4	3393.9	3631.6
17.5°	2264.7	2276.4	2289.3	2330.6	2432.7	2608.4	2870.7	3165.2	3440.4	3481.7	3773.7
20°	2302.3	2308.7	2309.9	2338.4	2428.8	2605.9	2893.9	3227.2	3528.3	3583.8	3914.6
22.5°	2350.0	2352.6	2350.0	2369.4	2453.3	2625.2	2924.9	3302.1	3626.4	3678.1	4056.6
25°	2573.6	2524.5	2462.5	2424.9	2494.7	2662.6	2971.5	3403.0	3733.7	3784.1	4194.9
27.5°	3267.3	3126.5	2904.2	2655.0	2580.0	2717.0	3036.0	3505.0	3842.2	3887.4	4343.4
30°	4393.9	4209.2	3831.9	3269.9	2853.9	2830.6	3120.0	3607.1	3957.2	4006.3	4502.4
32.5°	5523.0	5477.8	5042.4	4264.7	3470.1	3083.8	3259.5	3745.3	4109.6	4148.4	4716.8
35°	6665.1	6573.3	6216.8	5448.1	4419.7	3599.3	3492.1	3926.2	4309.9	4353.8	5029.5
37.5°	7539.7	7484.1	7263.3	6630.2	5546.3	4395.2	3890.0	4206.5	4600.6	4649.7	5430.0
40°	8312.3	8286.4	8211.5	7794.2	6805.9	5436.5	4508.9	4640.6	5003.6	5061.8	5920.9
42.5°	8919.6	8980.2	9022.9	8906.6	8104.3	6625.0	5340.9	5250.5	5565.6	5625.1	6546.3
45°	9540.9	9561.6	9733.4	9901.4	9393.6	7867.9	6278.8	5964.9	6264.6	6338.2	7295.5
47.5°	9940.1	10022.9	10325.1	10620.9	10477.6	9100.4	7286.5	6808.5	7074.7	7212.8	8135.3
50°	9969.9	10126.2	10542.1	11057.7	11266.9	10273.5	8382.0	7769.7	8052.6	8205.0	9031.9
52.5°	9475.0	9717.9	10362.5	11117.0	11693.3	11266.9	9515.1	8730.8	9093.9	9292.9	9962.1
55°	7264.6	7582.3	9686.9	10794.1	11710.1	12020.2	10618.4	9732.2	10254.1	10478.9	10967.2
57.5°	6329.2	6489.4	7616.0	10233.4	11398.7	12323.8	11615.8	10685.6	11516.3	11795.4	11916.8
60°	5265.9	5476.5	6387.3	9316.1	10976.2	12353.5	12496.9	11915.5	12884.5	13198.4	12787.6
62.5°	3578.7	3807.4	4713.0	7740.0	10398.7	12339.3	13219.0	13181.6	14405.0	14742.3	13525.3
65°	2217.0	2360.4	2957.2	6320.2	9591.3	12354.7	13974.8	14719.0	16009.7	16352.0	14096.3
67.5°	1751.8	1817.7	2129.1	4852.5	8199.9	12005.9	14729.4	16164.7	17519.9	17791.2	14270.7
70°	1176.9	1217.0	1549.0	3253.0	6100.5	10396.2	14715.1	16890.8	18297.7	18433.3	13635.1
72.5°	620.1	651.2	905.7	1506.4	3684.6	7389.8	12403.8	16022.6	17523.8	17319.6	11654.6
75°	310.1	361.7	609.8	764.9	1573.6	4121.2	7702.5	12632.5	13792.7	13002.0	7477.7
77.5°	235.1	284.2	503.9	503.9	547.8	1387.5	3262.2	6889.8	6355.0	5291.8	2195.0
80°	149.9	193.8	440.5	381.1	228.7	352.7	850.1	1930.2	1350.0	1027.0	399.2
82.5°	87.8	126.6	367.0	251.9	127.9	130.5	240.3	410.8	350.1	272.5	122.7
85°	34.8	82.7	251.9	99.5	50.4	32.3	72.4	87.8	72.4	54.2	31.1
87.5°	0.0	19.4	44.0	0.0	3.9	2.6	5.1	6.5	6.5	5.1	10.4
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°	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0	3191.0
2.5°	3205.3	3207.8	3215.6	3217.0	3198.8	3175.6	3166.5	3162.6	3147.2	3145.8	3148.4
5°	3244.0	3255.7	3244.0	3210.4	3130.4	3017.9	2932.7	2862.9	2799.6	2780.2	2768.6
7.5°	3321.5	3333.2	3298.3	3166.5	2965.0	2741.5	2540.0	2397.8	2270.0	2222.1	2202.7
10°	3432.6	3448.2	3338.3	3072.2	2715.6	2356.5	2015.5	1775.1	1587.8	1511.6	1479.3
12.5°	3572.2	3578.7	3360.4	2928.8	2391.3	1878.5	1395.3	1138.2	971.5	909.5	890.1
15°	3726.0	3716.9	3362.9	2733.8	1949.5	1328.1	910.8	748.0	680.8	660.2	660.2
17.5°	3887.4	3850.0	3311.3	2452.1	1465.0	908.3	675.7	636.9	625.2	620.1	618.8
20°	4046.3	3962.3	3217.0	2083.9	1051.6	678.2	613.7	602.1	595.6	593.0	590.4
22.5°	4191.0	4047.6	3055.4	1656.3	763.5	599.4	580.0	569.7	558.1	553.0	551.7
25°	4331.9	4096.7	2828.1	1257.1	611.1	560.7	545.2	525.8	510.3	503.9	501.2
27.5°	4468.8	4127.7	2543.8	930.2	545.2	524.5	496.1	468.9	457.4	454.8	452.1
30°	4614.8	4138.0	2220.9	693.7	505.1	479.3	438.0	406.9	400.5	401.8	401.8
32.5°	4793.1	4153.6	1895.2	568.5	471.6	425.1	376.0	343.7	338.5	343.7	342.3
35°	5006.2	4184.6	1581.4	523.3	441.9	369.5	316.5	289.4	284.2	288.1	286.8
37.5°	5295.7	4235.0	1288.0	514.1	417.3	323.0	266.1	244.2	244.2	245.5	244.2
40°	5680.7	4369.3	1025.8	507.7	404.4	288.1	224.8	215.8	219.7	222.2	222.2
42.5°	6149.6	4654.8	848.8	500.0	390.1	272.5	204.1	200.3	206.7	209.3	209.3
45°	6675.4	5016.6	786.8	487.1	377.2	282.9	195.1	189.9	197.6	199.0	200.3
47.5°	7219.3	5370.6	779.0	472.8	364.3	298.5	192.5	180.9	189.9	191.2	192.5
50°	7769.7	5601.8	786.8	450.9	343.7	298.5	193.8	171.8	179.6	183.5	184.7
52.5°	8323.9	5707.7	781.7	403.1	307.5	280.3	193.8	164.1	171.8	174.5	174.5
55°	8861.3	5687.1	702.8	332.0	261.0	248.0	188.6	157.6	162.8	164.1	164.1
57.5°	9286.4	5399.0	556.8	258.4	211.9	206.7	171.8	149.9	153.8	152.4	152.4
60°	9508.6	4765.9	397.9	199.0	166.7	162.8	151.2	139.5	142.1	135.6	134.4
62.5°	9511.2	3928.7	266.1	157.6	133.0	129.1	129.1	125.4	122.7	109.8	106.0
65°	9308.3	2999.9	177.0	125.4	107.2	100.8	108.5	107.2	98.2	80.1	77.5
67.5°	8848.4	1966.4	134.4	98.2	82.7	78.8	86.5	90.4	83.9	67.1	65.9
70°	7902.7	1144.6	111.1	76.3	62.0	58.1	69.8	77.5	69.8	54.2	51.7
72.5°	6564.3	617.6	90.4	56.9	42.6	38.7	55.6	63.3	55.6	40.1	38.7
75°	4259.5	330.8	69.8	37.5	21.9	24.5	41.3	46.5	38.7	25.8	23.3
77.5°	1430.2	146.0	44.0	18.0	10.4	10.4	24.5	28.4	18.0	9.0	7.8
80°	319.1	60.7	18.0	7.8	3.9	3.9	5.1	5.1	2.6	0.0	0.0
82.5°	104.7	24.5	7.8	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	40.1	9.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.5	1.3	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)