

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: P971547

Luminaire Tested: **NAV-SB6D-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971547
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54497.2 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - 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

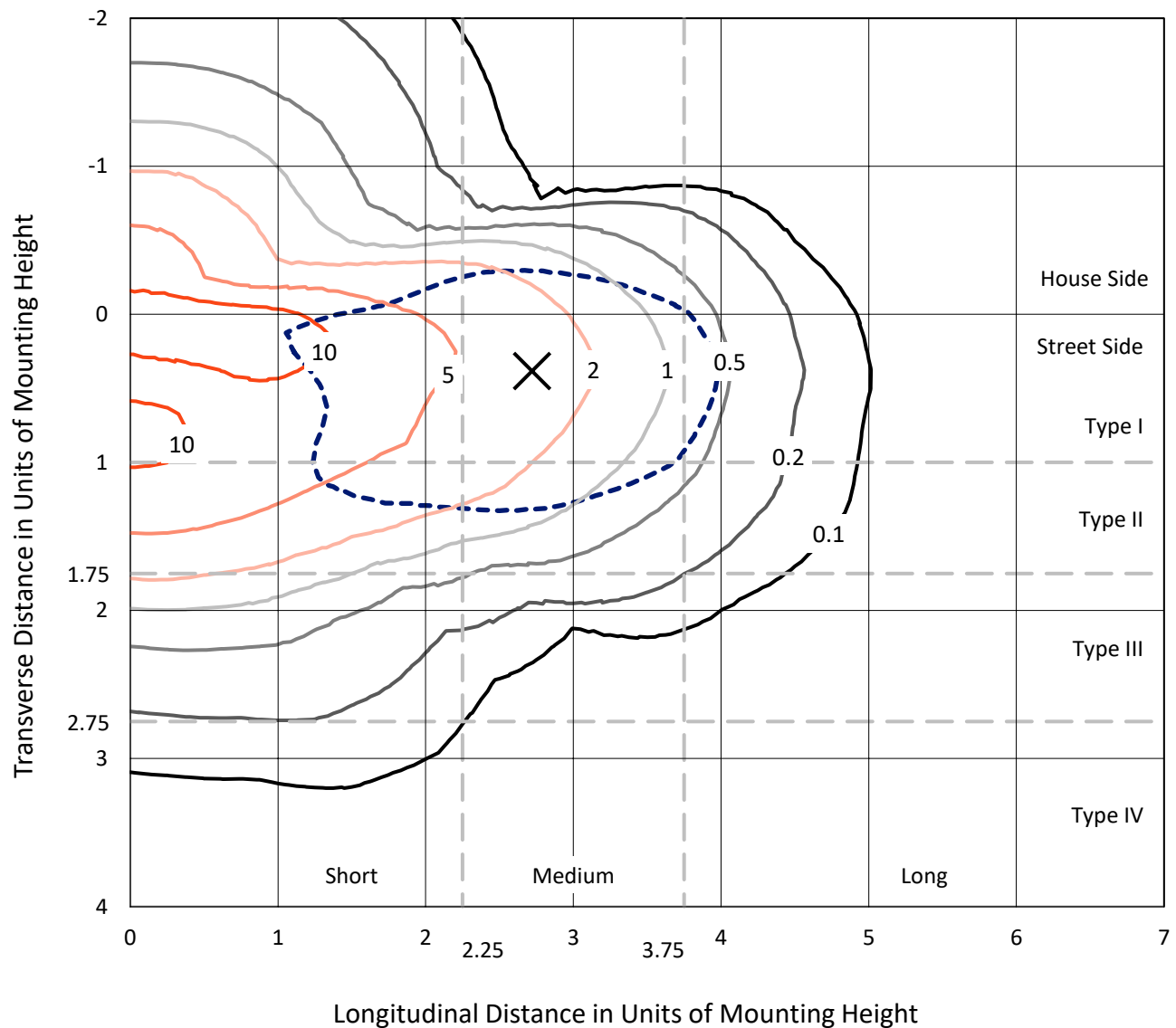


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Iso-Footcandle Lines of Horizontal Illumination

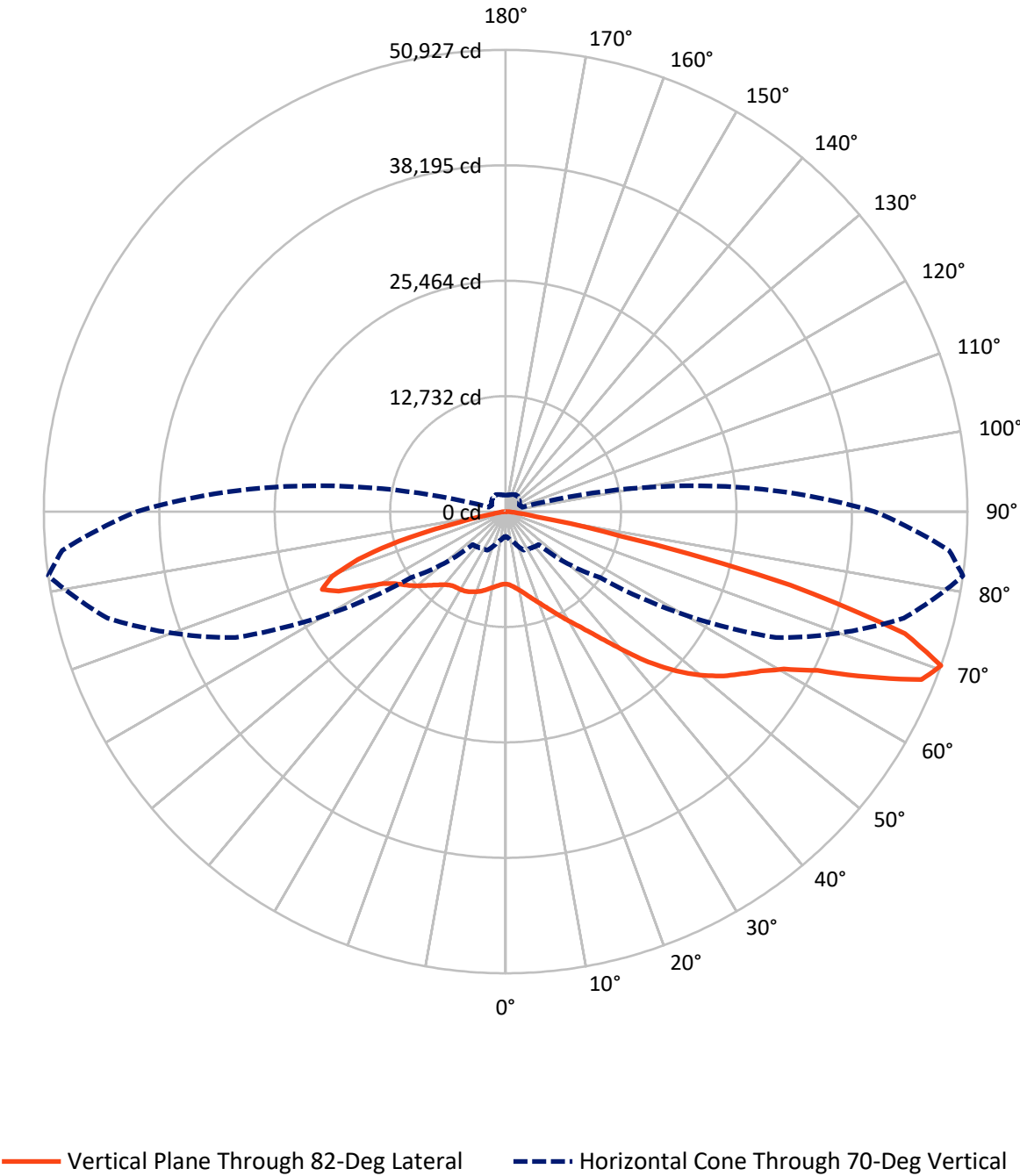
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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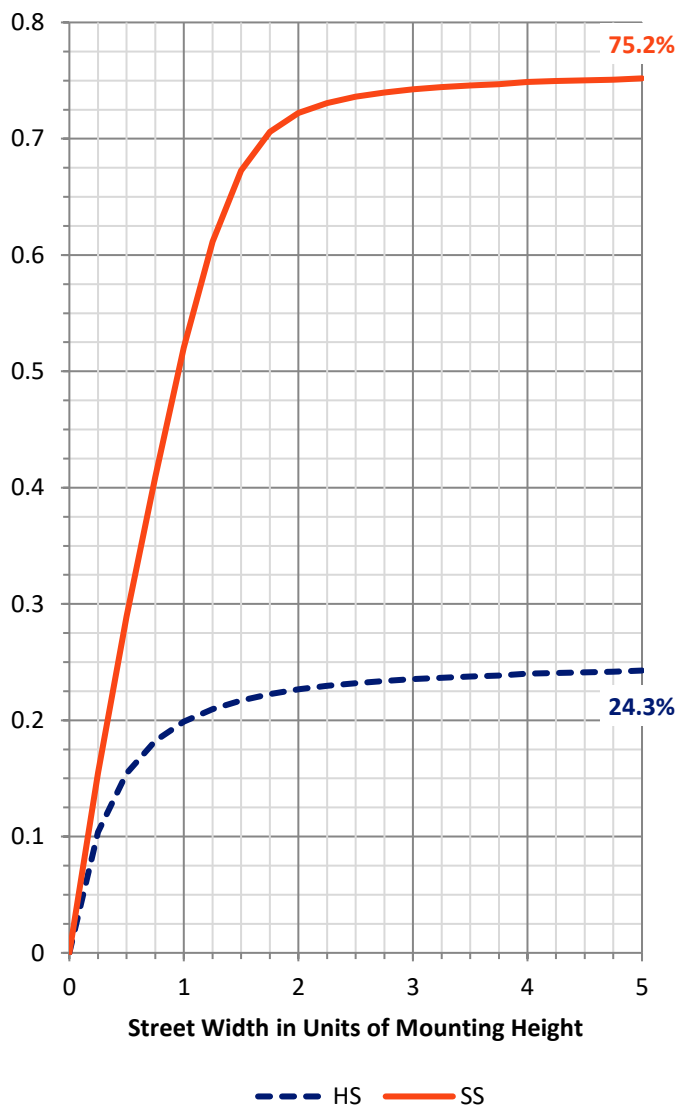
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13434.9	0.0	13434.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	41062.3	0.0	41062.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	54497.2	0.0	54497.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	754.4	1.4
10°-20°	2167.4	4.0
20°-30°	3625.9	6.7
30°-40°	5664.6	10.4
40°-50°	9021.5	16.6
50°-60°	12554.5	23.0
60°-70°	13132.5	24.1
70°-80°	6863.8	12.6
80°-90°	712.7	1.3
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°	54497.2	100.0
0°-180°	54497.2	100.0

Coefficient of Utilization



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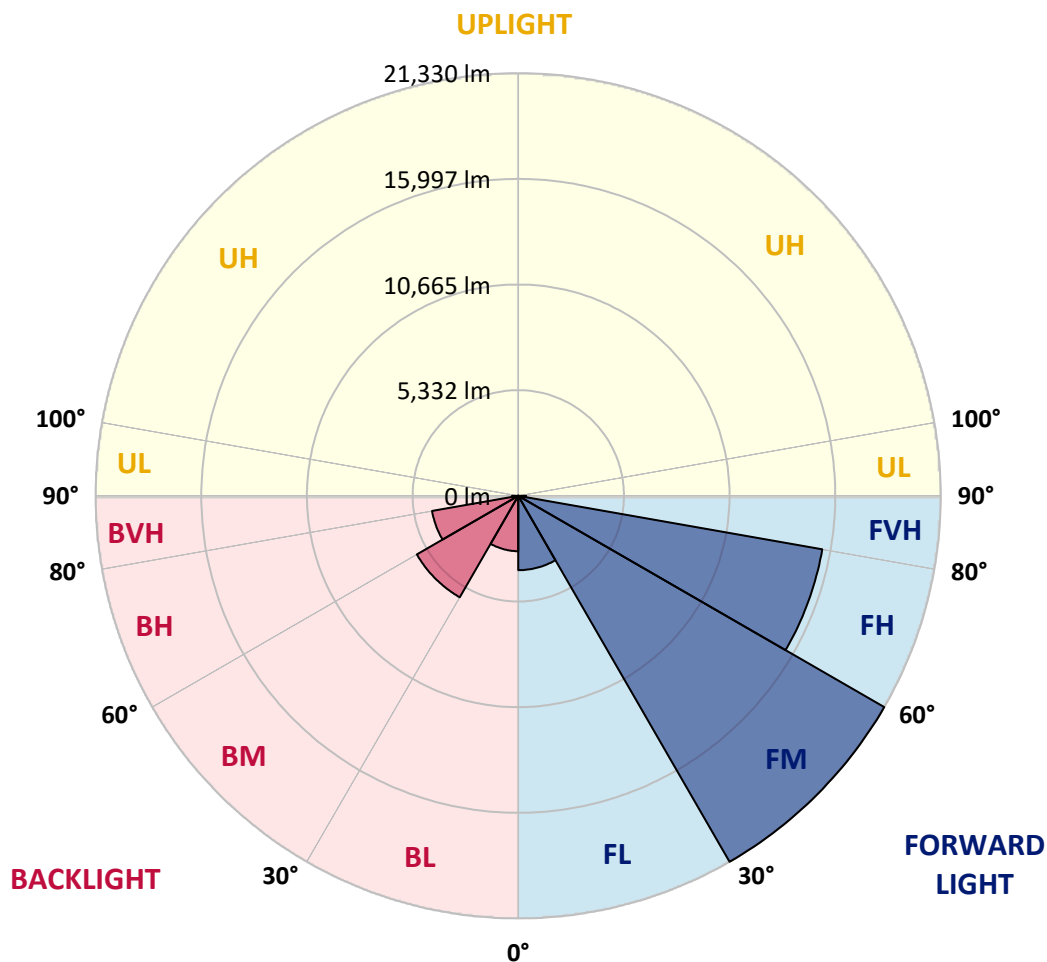
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3752.7	6.9			
FM	(30°-60°)	21329.7	39.1			
FH	(60°-80°)	15580.9	28.6			G5
FVH	(80°-90°)	399.0	0.7			G3/500
BL	(0°-30°)	2794.9	5.1	B4/5000		
BM	(30°-60°)	5910.8	10.8	B4/8500		
BH	(60°-80°)	4415.4	8.1	B4/5000		G4/5000
BVH	(80°-90°)	313.7	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0
2.5°	8180.8	8227.1	8212.6	8198.2	8198.2	8178.0	8175.1	8146.1	8123.0	8085.4	8076.7
5°	8285.0	8334.1	8328.3	8339.9	8377.4	8386.1	8394.9	8377.4	8331.2	8285.0	8264.7
7.5°	8192.4	8247.4	8264.7	8334.1	8449.8	8553.8	8631.9	8663.7	8620.4	8553.8	8522.1
10°	7880.1	7940.8	8001.6	8166.4	8371.7	8617.5	8825.7	8950.0	8941.4	8877.7	8822.8
12.5°	7246.7	7310.4	7440.6	7761.5	8137.5	8571.3	8958.7	9219.0	9308.6	9262.3	9166.9
15°	6740.7	6795.6	6893.9	7223.7	7712.4	8371.7	9007.9	9513.9	9742.4	9716.4	9600.7
17.5°	6726.3	6749.4	6810.1	6966.3	7342.2	8059.4	8955.8	9803.1	10239.8	10236.9	10092.3
20°	6980.8	6989.4	7024.1	7055.9	7269.9	7822.3	8822.8	10043.2	10797.9	10797.9	10641.8
22.5°	7333.6	7327.7	7362.5	7333.6	7437.6	7802.0	8738.9	10254.2	11419.6	11465.9	11269.3
25°	7862.8	7833.8	7825.2	7758.6	7778.8	7990.0	8831.5	10494.3	12157.0	12252.4	12006.6
27.5°	8568.3	8522.1	8490.3	8336.9	8285.0	8377.4	9114.9	10783.4	12978.2	13143.1	12830.8
30°	9487.9	9404.1	9357.7	9091.8	8903.8	8918.2	9542.9	11168.0	13837.1	14103.2	13707.0
32.5°	10742.9	10612.8	10488.4	10051.8	9707.7	9594.9	10095.2	11700.1	14768.3	15193.4	14684.5
35°	12148.3	12044.3	11911.2	11237.4	10708.3	10447.9	10841.2	12443.3	15858.5	16532.2	15870.1
37.5°	13501.7	13412.0	13475.7	12567.6	11885.2	11506.3	11818.7	13440.9	17203.2	18198.0	17356.4
40°	14901.3	14832.0	14840.6	13973.0	13177.8	12752.7	13004.3	14693.1	18744.5	20178.8	19143.5
42.5°	16422.3	16370.4	16196.8	15427.6	14534.1	14137.9	14369.3	16139.0	20398.5	22434.4	21104.1
45°	18125.6	18093.8	17931.9	17049.8	16026.2	15580.9	15893.2	17735.3	22061.4	24556.9	23073.5
47.5°	19597.6	19623.6	19603.3	18860.1	17798.8	17145.3	17518.4	19400.9	23608.4	26552.3	24961.8
50°	20306.1	20442.0	20641.4	20410.1	19750.8	19085.7	19158.0	21008.7	25083.3	28423.2	26772.1
52.5°	19935.8	20193.2	20736.9	21107.1	21361.5	21222.7	21029.0	22605.0	26471.3	30112.0	28483.9
55°	18556.5	18918.0	19820.2	20713.8	22012.2	23021.4	23275.9	24374.8	27824.6	31598.4	30103.3
57.5°	16043.6	16630.6	17440.3	19247.7	21433.9	23891.8	25895.8	26829.9	29258.9	33186.0	31798.0
60°	11734.8	12521.4	13527.7	16217.0	19409.6	23426.3	28125.4	30600.8	31297.7	35242.1	34004.4
62.5°	7510.0	7995.7	8921.1	11454.3	15124.0	21040.6	28807.8	35314.3	34753.3	38613.9	37312.6
65°	5141.6	5453.9	6301.2	7723.9	9777.1	15661.9	26980.3	38848.1	40241.9	43957.8	42968.8
67.5°	3736.1	3973.3	4696.2	5942.6	6370.6	9268.2	20936.4	38686.2	45577.2	49463.8	47925.4
70°	2724.0	2891.7	3499.0	4696.2	4901.5	5156.1	12683.3	32885.3	45461.6	50927.0	49085.0
72.5°	2018.4	2134.2	2541.9	3643.7	3967.5	3481.7	6278.0	23900.5	39065.0	46063.1	44585.3
75°	1460.3	1547.1	1847.9	2787.7	3175.1	2651.8	3131.8	13967.3	27249.2	32402.3	32662.5
77.5°	1116.2	1182.7	1379.3	2041.6	2541.9	1989.5	1943.3	6425.5	12920.4	12984.1	13712.8
80°	896.5	939.8	1046.8	1437.3	1949.0	1489.2	1266.6	2594.0	4083.2	3455.7	3626.2
82.5°	659.3	731.6	884.9	1009.2	1393.8	1026.5	772.1	1309.9	1552.9	1336.0	1347.6
85°	376.0	425.1	534.9	722.9	890.6	627.5	442.5	581.3	722.9	592.9	529.2
87.5°	133.0	173.5	188.0	283.4	387.4	260.2	170.7	167.7	237.1	176.4	147.5
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°	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0	7990.0
2.5°	8047.8	8033.3	7975.5	7897.4	7816.4	7738.3	7712.4	7657.5	7619.8	7599.6	7622.7
5°	8209.7	8163.5	8027.6	7854.1	7671.9	7475.2	7336.4	7209.2	7116.7	7029.9	7064.6
7.5°	8441.1	8360.1	8125.9	7822.3	7498.4	7171.6	6928.7	6743.6	6619.2	6538.3	6555.7
10°	8710.0	8585.7	8227.1	7773.1	7272.8	6804.4	6518.1	6359.0	6280.9	6237.5	6249.1
12.5°	9019.5	8843.1	8331.2	7660.3	6928.7	6393.7	6197.0	6150.8	6153.7	6156.6	6162.4
15°	9401.2	9155.4	8415.0	7414.5	6480.5	6078.6	6043.8	6118.9	6197.0	6234.7	6231.8
17.5°	9832.0	9485.0	8429.5	7009.7	6040.9	5876.1	5986.0	6148.0	6266.4	6318.5	6330.1
20°	10294.7	9820.4	8325.5	6437.1	5679.4	5711.3	5907.9	6116.1	6246.2	6312.8	6330.1
22.5°	10823.9	10179.1	8076.7	5835.6	5384.5	5531.9	5763.3	5965.7	6101.6	6168.1	6185.5
25°	11428.3	10581.0	7686.4	5329.6	5130.0	5329.6	5560.8	5728.6	5838.5	5899.2	5916.6
27.5°	12099.2	11000.3	7165.8	4927.6	4907.3	5121.3	5312.2	5442.3	5500.2	5546.4	5563.8
30°	12772.9	11382.0	6535.4	4624.0	4713.6	4916.0	5051.9	5109.7	5127.2	5135.8	5156.1
32.5°	13501.7	11711.6	5873.1	4372.3	4528.6	4716.4	4797.4	4823.4	4742.5	4687.5	4705.0
35°	14383.7	12064.5	5225.4	4172.9	4346.3	4508.3	4534.3	4511.1	4415.7	4303.0	4308.8
37.5°	15473.9	12504.1	4707.8	4031.1	4175.7	4282.8	4250.9	4245.1	4253.8	4120.8	4129.4
40°	16809.9	13076.6	4329.0	3921.2	4037.0	4060.0	3970.4	4019.5	4062.9	3860.6	3866.3
42.5°	18293.4	13767.7	4088.9	3846.1	3921.2	3866.3	3727.5	3782.5	3776.6	3510.6	3507.8
45°	19805.8	14519.6	4005.1	3791.1	3814.2	3704.3	3551.1	3565.6	3444.1	3204.0	3212.8
47.5°	21309.4	15326.4	4057.2	3744.8	3681.2	3556.9	3438.4	3374.7	3195.4	3016.2	3016.2
50°	22784.3	16173.7	4248.0	3652.3	3499.0	3426.8	3340.0	3227.2	3036.4	2883.1	2871.5
52.5°	24152.1	17026.8	4462.0	3499.0	3270.6	3313.9	3259.0	3128.9	2940.9	2784.8	2787.7
55°	25447.6	17879.8	4545.9	3288.0	3056.7	3215.6	3183.9	2943.8	2718.3	2591.0	2579.4
57.5°	26858.8	18906.4	4453.3	3019.0	2883.1	3102.9	2981.4	2715.3	2585.3	2489.8	2481.1
60°	28813.7	20517.1	4253.8	2686.4	2718.3	2935.2	2726.9	2617.0	2475.4	2368.4	2362.6
62.5°	32061.1	23521.7	3932.8	2356.8	2524.5	2686.4	2605.4	2495.6	2351.0	2246.9	2246.9
65°	36861.5	27697.4	3328.5	2099.4	2307.7	2443.6	2475.4	2365.5	2215.1	2105.2	2111.0
67.5°	40909.9	30317.3	2518.7	1885.5	2085.0	2246.9	2336.6	2229.6	2070.5	1963.5	1966.4
70°	40687.3	28414.5	1923.0	1674.3	1888.4	2053.2	2168.8	2085.0	1914.4	1813.1	1821.8
72.5°	36138.5	23770.4	1555.7	1460.3	1688.8	1850.7	1989.5	1925.9	1752.4	1654.1	1654.1
75°	26549.3	16873.6	1243.4	1243.4	1440.1	1639.6	1792.9	1752.4	1593.4	1524.0	1503.7
77.5°	11191.2	7079.1	974.6	1032.4	1197.2	1408.2	1599.1	1613.7	1474.8	1561.6	1417.0
80°	2975.7	1951.9	743.2	812.6	939.8	1162.5	1390.9	1385.2	1234.8	1153.8	1072.9
82.5°	1133.5	769.3	529.2	572.6	679.6	890.6	1101.8	1136.4	986.0	853.1	853.1
85°	436.6	329.6	326.8	344.1	396.2	589.9	832.8	861.7	743.2	630.4	650.7
87.5°	112.7	98.3	121.5	115.6	182.1	315.2	477.1	494.5	454.0	263.1	376.0
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)