

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: P968801

Luminaire Tested: **NAV-SB5C-740-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-740-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41722.6 lumens
Efficiency: N/A
Efficacy: 167.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 249.5
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

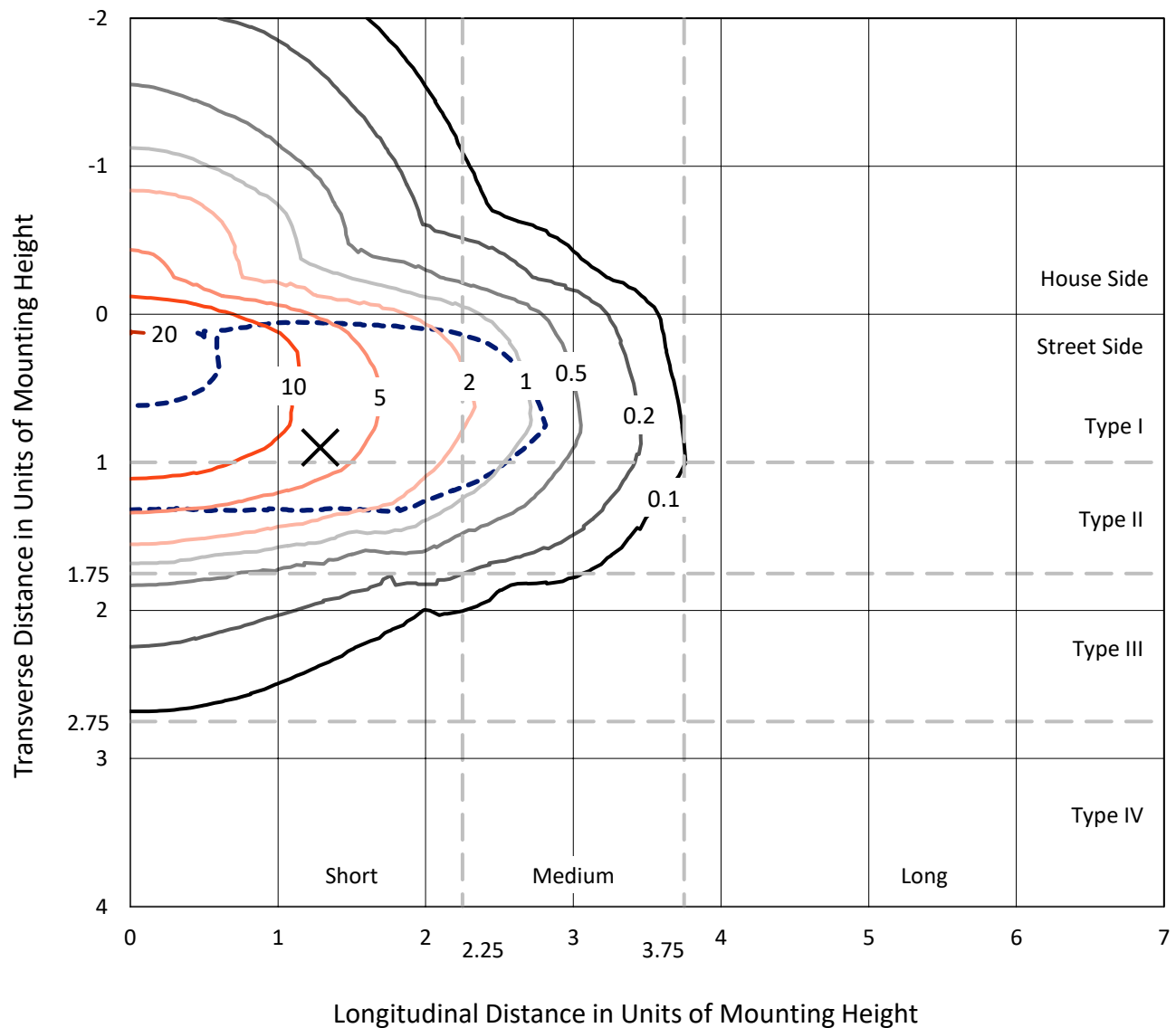


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Iso-Footcandle Lines of Horizontal Illumination

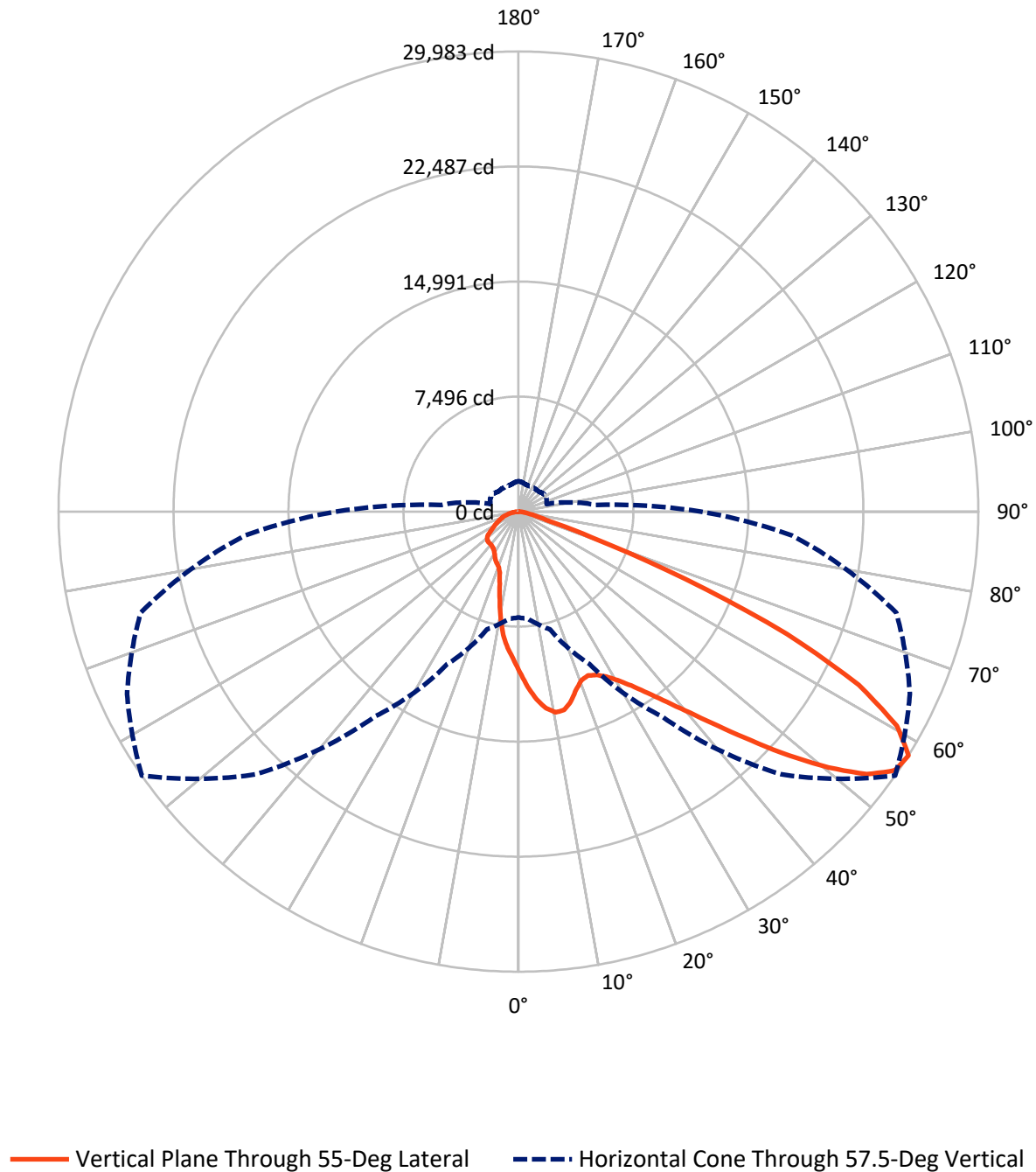
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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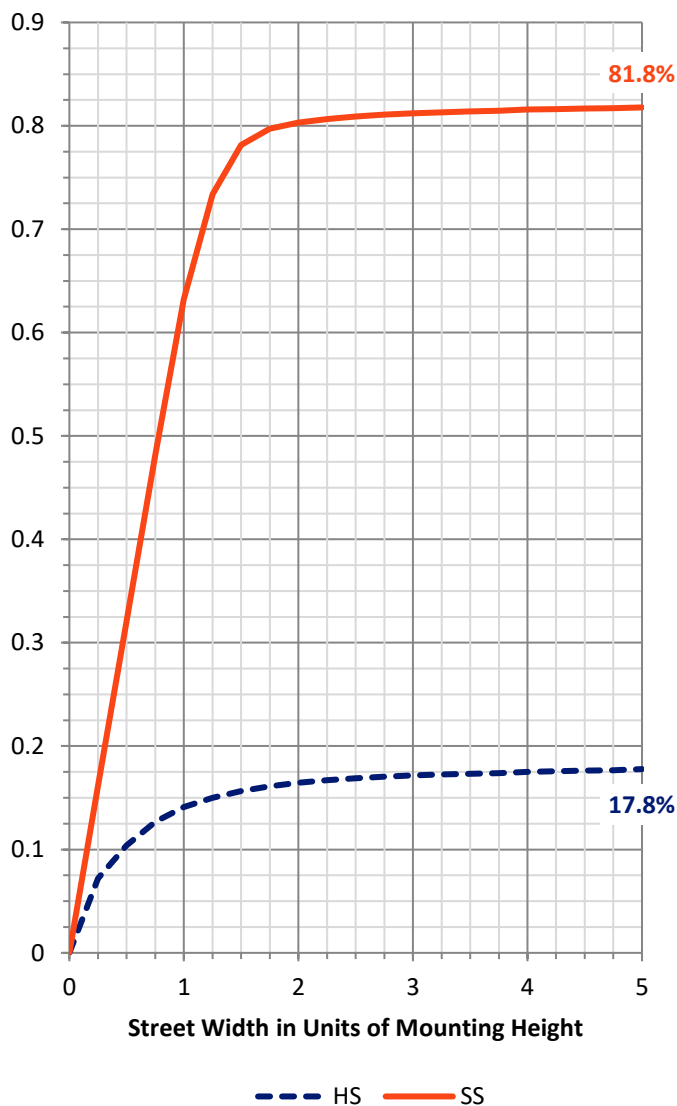
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7549.5	0.0	7549.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	34173.1	0.0	34173.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	41722.6	0.0	41722.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	970.1	2.3
10°-20°	2448.6	5.9
20°-30°	3907.2	9.4
30°-40°	6186.1	14.8
40°-50°	9468.5	22.7
50°-60°	10141.6	24.3
60°-70°	6380.1	15.3
70°-80°	1886.7	4.5
80°-90°	333.6	0.8
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°	41722.6	100.0
0°-180°	41722.6	100.0

Coefficient of Utilization



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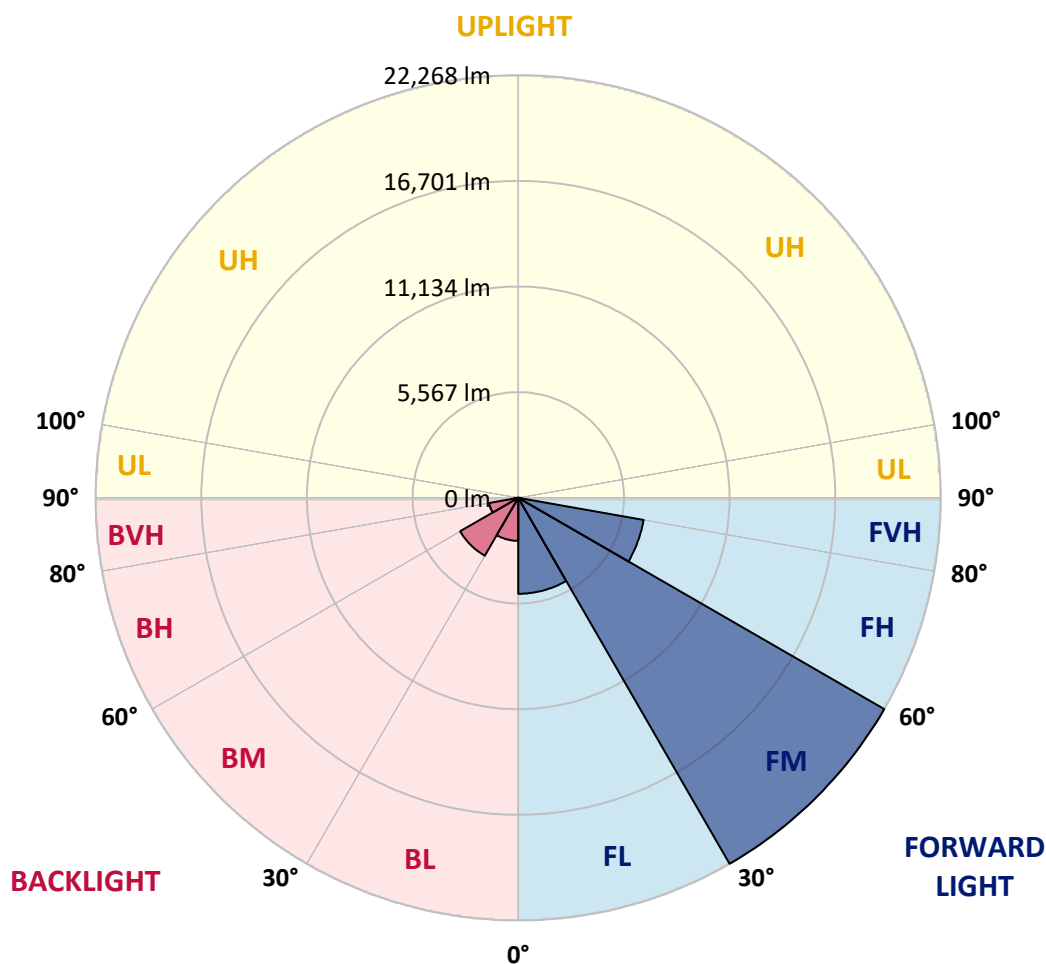
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5056.8	12.1			
FM	(30°-60°)	22267.7	53.4			
FH	(60°-80°)	6707.7	16.1			G3/7500
FVH	(80°-90°)	140.9	0.3			G2/225
BL	(0°-30°)	2269.1	5.4	B3/2500		
BM	(30°-60°)	3528.6	8.5	B3/5000		
BH	(60°-80°)	1559.1	3.7	B3/2500		G3/2500
BVH	(80°-90°)	192.6	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4
2.5°	11994.3	11985.7	12033.2	11871.4	11761.4	11612.5	11416.3	11166.1	10896.5	10611.8	10488.8
5°	13074.9	12999.5	13049.1	12928.2	12807.5	12583.2	12292.0	11884.4	11386.1	10818.9	10516.9
7.5°	12904.5	12852.8	12980.0	13087.9	13178.4	13150.4	12936.9	12509.8	11867.0	11043.1	10605.3
10°	11530.6	11472.4	11651.4	12024.6	12572.3	13049.1	13307.9	13042.6	12358.8	11289.0	10691.6
12.5°	10318.5	10290.4	10409.1	10711.0	11319.3	12233.8	13260.4	13508.5	12870.0	11580.2	10808.1
15°	9800.8	9766.3	9841.7	9994.9	10383.1	11235.1	12829.0	13827.7	13372.6	11916.6	10993.5
17.5°	9686.5	9647.7	9680.0	9759.8	10010.0	10659.3	12177.7	13985.1	13896.7	12292.0	11148.8
20°	9897.9	9865.5	9869.8	9865.5	10040.2	10555.8	11724.8	13924.7	14354.0	12637.1	11299.8
22.5°	10409.1	10355.2	10357.3	10242.9	10337.8	10736.9	11606.1	13763.0	14761.6	12939.1	11414.1
25°	11241.6	11144.5	11164.0	10872.8	10846.9	11142.4	11791.6	13637.8	15167.1	13180.6	11435.7
27.5°	12380.5	12270.4	12212.2	11778.7	11571.6	11718.2	12169.0	13681.0	15551.0	13389.9	11381.8
30°	13804.0	13670.2	13551.6	12936.9	12561.6	12507.7	12755.7	13965.7	16003.9	13609.8	11289.0
32.5°	15548.8	15393.6	15177.9	14362.6	13834.1	13551.6	13514.9	14472.6	16534.6	13890.2	11241.6
35°	17625.9	17423.2	17116.9	16062.2	15393.6	14815.6	14515.7	15203.7	17261.4	14313.0	11295.5
37.5°	19765.5	19536.9	19256.5	18001.3	17179.4	16327.5	15736.5	16195.9	18229.8	14886.7	11437.9
40°	21739.0	21482.4	21221.4	20104.1	19222.0	18195.3	17231.2	17451.2	19414.0	15572.6	11679.5
42.5°	22903.7	22714.0	22614.8	22010.8	21329.2	20287.5	19090.4	18939.4	20744.8	16362.0	11955.5
45°	22852.0	22774.4	23080.6	23330.8	23169.1	22591.0	21268.9	20585.2	22079.8	17045.8	12210.0
47.5°	21631.2	21683.0	22366.7	23773.0	24392.0	24694.0	23749.2	22200.7	23240.2	17556.9	12324.3
50°	18309.7	18352.8	19935.9	22968.5	24706.9	26408.7	26210.3	23777.3	24139.7	17869.6	12298.5
52.5°	15680.4	15708.4	16387.9	20583.0	23667.4	27271.5	28427.6	25263.4	24797.5	17955.9	12153.9
55°	11811.0	11908.0	12669.4	16148.5	20962.6	26587.7	29777.7	26794.7	25213.8	17964.6	12003.0
57.5°	6899.8	7005.5	7945.9	10961.2	16293.0	24204.4	29982.6	28153.6	25496.4	17895.6	11912.3
60°	3379.8	3425.1	3834.9	5761.0	10046.6	19612.4	28334.8	28811.4	25653.8	17858.9	11908.0
62.5°	2277.7	2271.2	2288.4	2842.7	4950.0	12600.4	24901.0	27659.6	25569.6	17718.7	11864.9
65°	1958.5	1934.7	1870.0	1995.1	2564.5	5763.2	19239.2	24221.6	24929.0	17367.1	11569.5
67.5°	1693.1	1695.2	1697.5	1658.7	1831.2	2659.5	11757.1	19079.7	22629.8	15702.0	10430.6
70°	1402.0	1421.4	1430.0	1430.0	1492.5	1744.9	5019.0	13077.1	17850.3	12311.4	8401.0
72.5°	1276.8	1235.8	1240.1	1218.6	1218.6	1328.6	2021.0	7413.1	11245.9	6925.7	5126.8
75°	1041.8	1067.6	1071.9	1056.9	1007.3	1013.7	1199.2	3110.2	4812.0	2873.0	2534.3
77.5°	899.4	899.4	908.0	897.3	858.4	759.2	800.2	1205.7	1637.0	1177.6	1266.1
80°	722.5	720.4	757.1	778.6	718.2	560.8	511.2	666.5	726.8	517.6	657.8
82.5°	351.6	373.1	519.8	593.2	545.7	405.5	312.7	414.1	388.3	228.7	295.5
85°	204.9	194.1	233.0	330.0	312.7	224.3	151.0	215.7	202.7	116.4	118.6
87.5°	64.7	60.4	47.5	112.1	90.6	62.5	41.0	62.5	56.1	25.9	25.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4	10454.4
2.5°	10335.7	10081.2	9828.8	9598.1	9457.9	9367.3	9276.7	9175.3	9136.4	9078.2
5°	10232.2	9740.4	9302.6	8925.1	8582.2	8312.5	8040.8	7820.7	7721.6	7788.5
7.5°	10171.8	9460.0	8785.0	8092.6	7426.1	6893.3	6429.6	6104.0	5957.3	5993.9
10°	10117.9	9143.0	8114.1	7020.6	6063.0	5403.0	4928.4	4680.4	4587.7	4607.1
12.5°	10068.3	8787.1	7305.3	5866.7	4848.7	4412.9	4277.0	4279.3	4296.5	4309.4
15°	10059.7	8357.8	6401.5	4857.3	4193.0	4164.9	4311.6	4404.3	4453.9	4469.0
17.5°	10046.6	7844.5	5480.6	4169.2	4033.4	4223.1	4359.0	4419.4	4458.2	4460.4
20°	9994.9	7193.1	4630.7	3841.4	3998.8	4162.7	4246.9	4294.3	4326.6	4337.5
22.5°	9835.3	6468.5	3968.6	3694.7	3860.8	3992.4	4091.6	4145.5	4164.9	4177.9
25°	9548.5	5657.5	3511.3	3554.5	3668.8	3834.9	3914.7	3925.5	3919.0	3938.5
27.5°	9173.1	4788.3	3226.7	3364.7	3511.3	3653.7	3696.9	3690.4	3677.5	3699.0
30°	8720.2	4007.4	3045.5	3151.2	3351.7	3481.2	3520.1	3504.9	3479.1	3502.7
32.5°	8241.4	3369.1	2896.6	3002.3	3220.2	3347.4	3386.3	3371.2	3351.7	3371.2
35°	7794.9	2922.6	2758.6	2903.1	3116.7	3241.8	3291.4	3293.5	3293.5	3317.3
37.5°	7385.1	2661.6	2644.3	2840.6	3045.5	3157.6	3228.9	3233.2	3140.4	3146.9
40°	7005.5	2551.5	2592.5	2799.6	2976.5	3084.3	3088.6	2847.0	2676.7	2672.4
42.5°	6694.9	2530.0	2607.7	2795.3	2926.9	2931.2	2627.1	2439.4	2391.9	2394.1
45°	6403.8	2523.5	2642.1	2795.3	2853.5	2532.2	2327.3	2277.7	2282.0	2299.2
47.5°	6078.0	2497.6	2648.6	2756.4	2642.1	2251.7	2191.3	2169.8	2161.2	2165.5
50°	5722.2	2405.0	2566.7	2678.8	2279.8	2131.0	2055.5	2049.0	2059.8	2066.3
52.5°	5346.9	2254.0	2426.5	2538.6	2113.8	2025.3	1941.1	1956.3	2003.8	2018.8
55°	5101.0	2077.1	2241.0	2258.3	1997.2	1926.1	1854.9	1889.4	1977.8	2005.9
57.5°	5036.2	1889.4	2029.6	2010.2	1848.5	1839.8	1796.6	1826.9	1939.0	1980.0
60°	5016.9	1721.2	1822.6	1807.5	1704.0	1744.9	1734.1	1749.3	1788.0	1801.0
62.5°	4865.9	1587.4	1637.0	1615.5	1574.5	1645.7	1671.6	1639.2	1669.4	1684.5
65°	4482.0	1479.6	1455.9	1440.7	1458.1	1522.7	1574.5	1509.8	1537.8	1581.0
67.5°	3847.8	1332.9	1268.2	1285.5	1339.4	1373.9	1440.7	1367.5	1391.1	1464.5
70°	3112.3	1147.5	1089.3	1138.8	1190.6	1261.8	1272.5	1222.9	1279.0	1361.0
72.5°	2202.2	959.8	918.8	1020.2	1037.4	1130.2	1106.5	1082.7	1160.4	1188.4
75°	1527.0	774.3	750.6	828.2	890.8	970.6	953.4	981.3	1145.3	1158.2
77.5°	966.3	601.8	586.7	636.3	722.5	811.0	839.1	1158.2	1956.3	2033.9
80°	560.8	448.6	431.4	470.2	545.7	627.6	808.8	1421.4	1289.8	1274.7
82.5°	312.7	308.4	286.9	297.7	364.5	452.9	1143.2	1000.8	813.1	839.1
85°	146.7	181.2	155.3	148.8	204.9	530.5	763.5	571.5	379.6	370.9
87.5°	38.8	34.5	34.5	38.8	86.3	457.3	304.1	243.7	144.5	140.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)