

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: P968814

Luminaire Tested: **NAV-SB5C-740-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29956.7 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

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

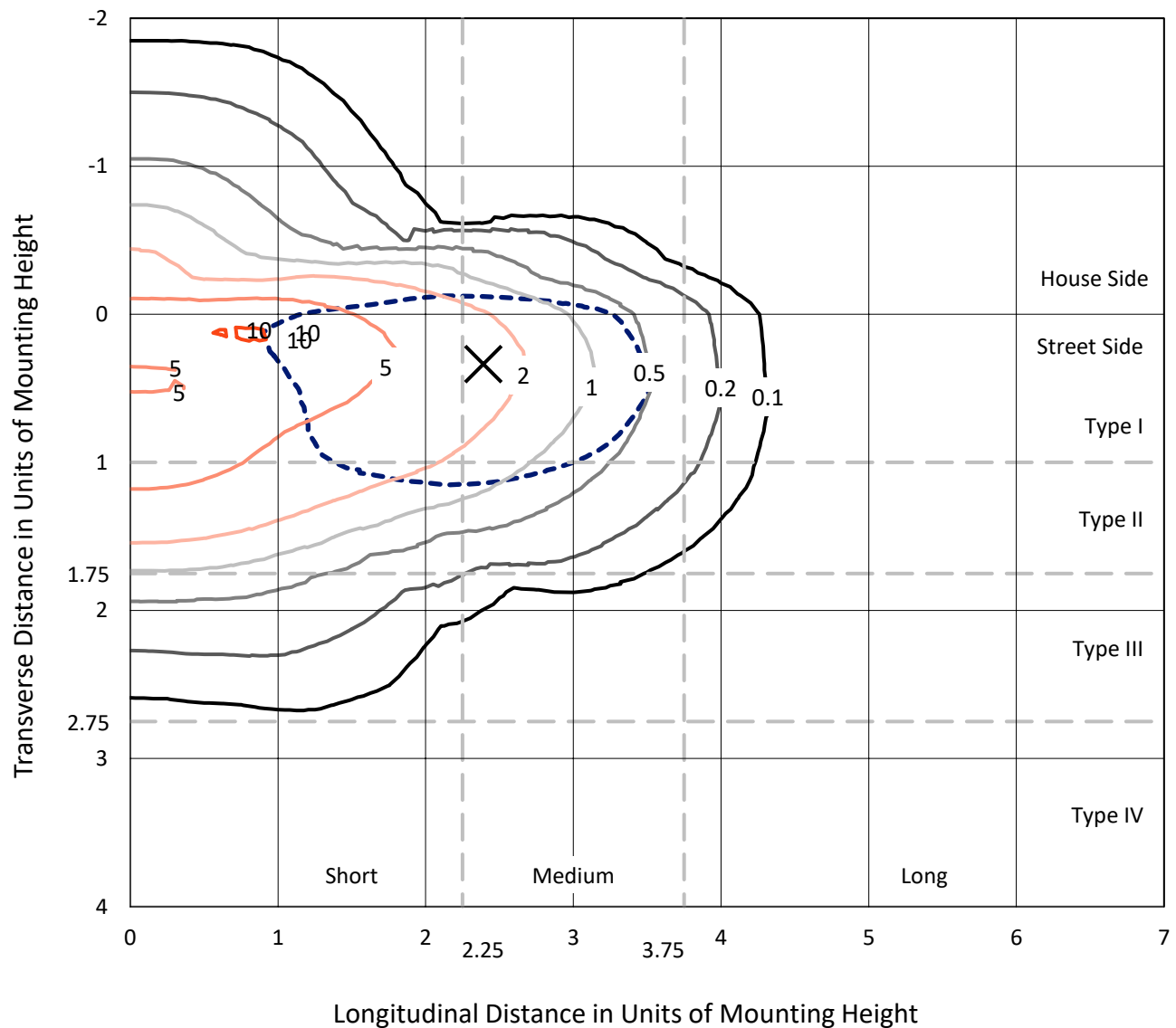


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Iso-Footcandle Lines of Horizontal Illumination

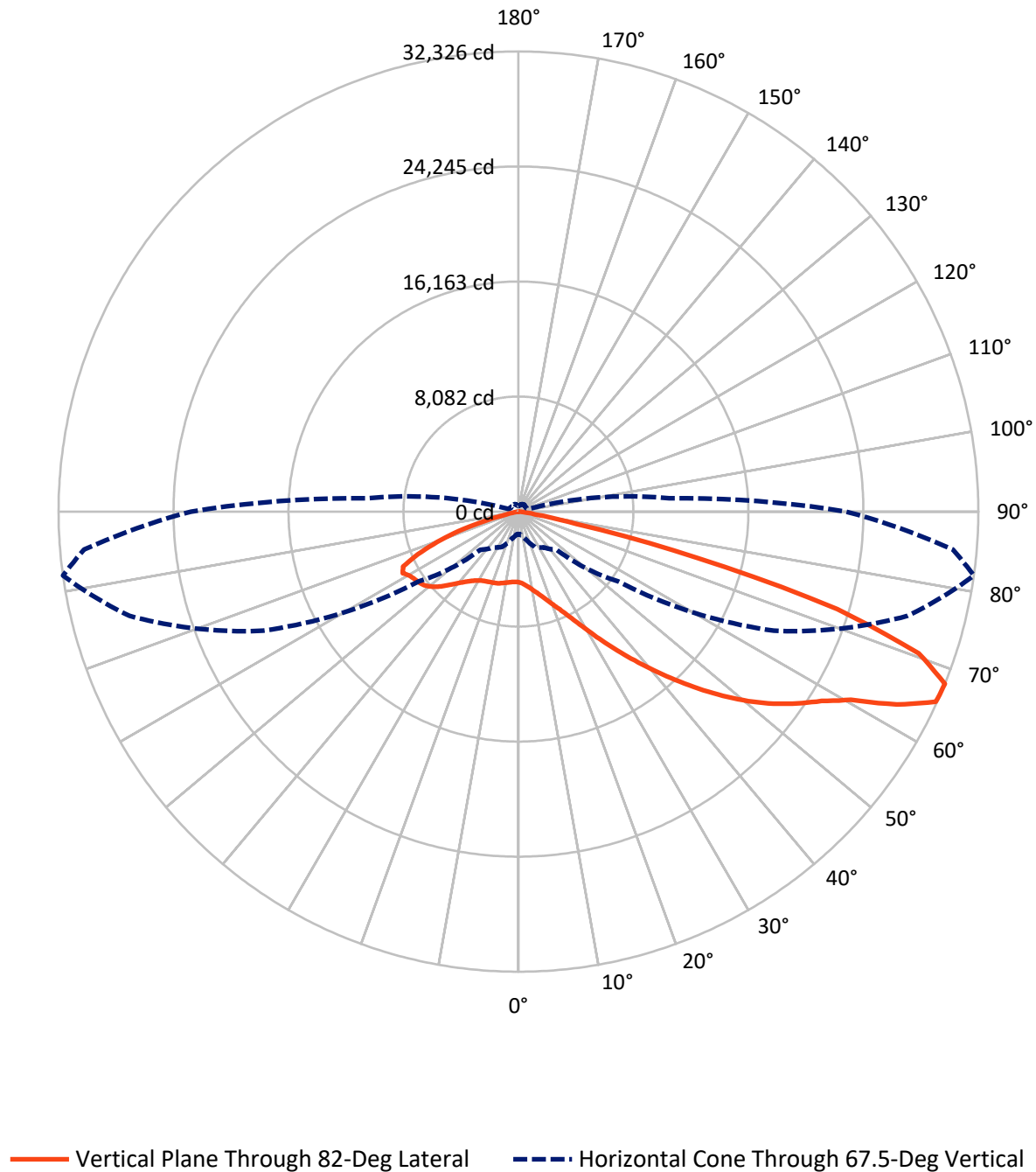
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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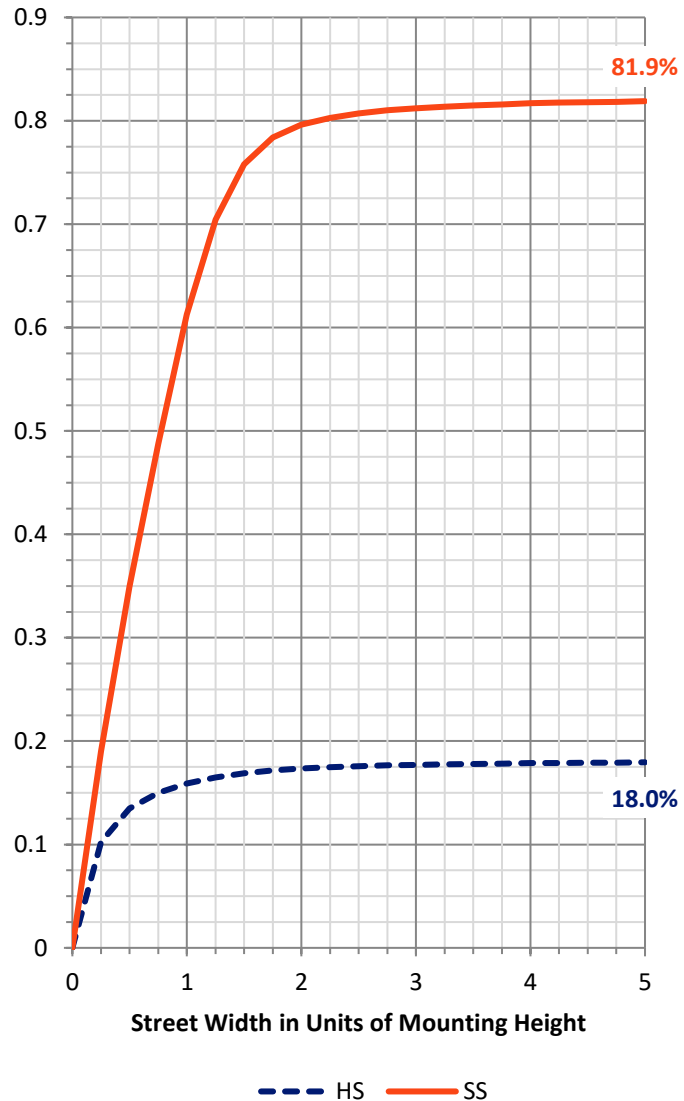
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5426.4	0.0	5426.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	24530.3	0.0	24530.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	29956.7	0.0	29956.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	442.1	1.5
10°-20°	1149.0	3.8
20°-30°	1840.3	6.1
30°-40°	3254.2	10.9
40°-50°	5701.6	19.0
50°-60°	7604.4	25.4
60°-70°	7079.3	23.6
70°-80°	2717.0	9.1
80°-90°	168.8	0.6
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°	29956.7	100.0
0°-180°	29956.7	100.0

Coefficient of Utilization



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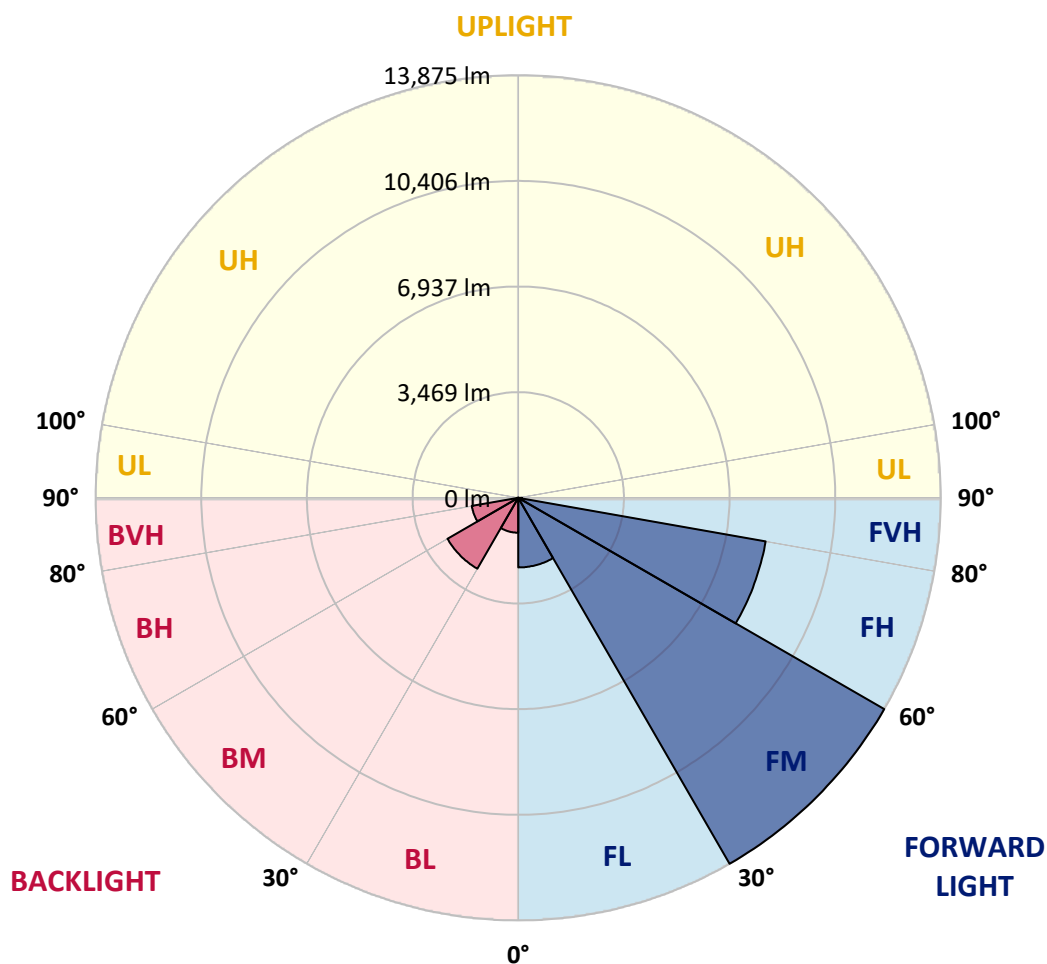
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2285.4	7.6			
FM	(30°-60°)	13874.7	46.3			
FH	(60°-80°)	8247.5	27.5			G4/12000
FVH	(80°-90°)	122.7	0.4			G2/225
BL	(0°-30°)	1146.0	3.8	B3/2500		
BM	(30°-60°)	2685.5	9.0	B3/5000		
BH	(60°-80°)	1548.8	5.2	B3/2500		G3/2500
BVH	(80°-90°)	46.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8
2.5°	5245.3	5275.6	5258.2	5249.6	5234.6	5212.9	5195.7	5141.8	5085.7	5049.0	5036.1
5°	5351.0	5381.2	5379.1	5387.7	5398.5	5404.9	5400.6	5340.2	5260.4	5197.9	5161.2
7.5°	5260.4	5294.9	5323.0	5366.1	5441.6	5521.4	5560.2	5547.3	5465.3	5379.1	5333.8
10°	5003.7	5040.4	5107.3	5208.6	5368.2	5540.8	5685.4	5752.2	5700.4	5605.5	5543.0
12.5°	4533.6	4570.3	4701.9	4921.8	5189.3	5489.1	5765.1	5944.2	5957.1	5862.2	5788.9
15°	4005.2	4041.9	4182.0	4458.1	4865.8	5346.7	5808.3	6146.9	6261.2	6179.2	6090.9
17.5°	3677.4	3709.7	3815.4	4037.6	4462.4	5062.1	5793.2	6362.6	6623.6	6558.9	6453.2
20°	3578.2	3606.2	3655.8	3811.1	4164.8	4766.6	5694.0	6565.3	7014.0	6977.3	6858.6
22.5°	3683.8	3709.7	3724.7	3793.8	4016.0	4572.4	5568.8	6772.4	7466.8	7471.1	7326.7
25°	3927.5	3953.4	3936.2	3979.3	4076.3	4512.0	5521.4	7016.1	8036.2	8083.7	7919.8
27.5°	4328.7	4330.8	4289.8	4287.7	4302.8	4602.7	5571.0	7277.1	8754.4	8842.9	8640.1
30°	5133.2	5100.8	4943.4	4773.0	4695.3	4874.4	5709.0	7585.5	9602.1	9759.5	9505.0
32.5°	6373.3	6325.9	6036.8	5629.3	5219.5	5312.2	5957.1	7937.0	10525.2	10809.9	10499.3
35°	7719.2	7706.3	7404.3	6798.2	6082.1	5935.6	6360.4	8398.5	11532.4	11985.3	11616.5
37.5°	8970.2	8963.6	8791.1	8077.2	7205.9	6804.7	7007.4	9002.5	12610.8	13266.5	12830.8
40°	10113.3	10132.6	9960.1	9321.7	8443.8	7919.8	7887.5	9748.8	13810.0	14661.9	14144.3
42.5°	11101.1	11122.6	10947.9	10475.6	9666.8	9153.5	8968.0	10663.3	14981.2	16161.0	15548.4
45°	11771.8	11905.6	11879.6	11502.2	10922.1	10389.3	10266.4	11810.7	16316.3	17750.4	17032.3
47.5°	11961.6	12084.5	12278.7	12330.4	11976.7	11452.6	11599.3	13193.2	17666.4	19342.2	18524.8
50°	11493.6	11607.9	12011.3	12548.3	12794.2	12632.4	12895.5	14674.9	19048.9	20929.6	19989.2
52.5°	10570.5	10687.0	11196.0	12045.7	13048.7	13557.7	14196.0	16135.0	20388.3	22432.9	21376.1
55°	9235.5	9358.4	10011.9	10973.9	12563.4	13939.4	15280.9	17593.0	21615.5	23785.2	22627.0
57.5°	7419.4	7510.0	8189.3	9535.3	11342.6	13559.8	16081.1	19184.7	22771.5	25113.8	23867.2
60°	4835.5	4915.4	5704.7	7205.9	9319.5	12291.6	16240.7	20959.8	24307.2	26841.4	25538.7
62.5°	3215.8	3269.7	3737.8	4839.8	6563.2	9856.6	15306.8	22376.9	26558.9	29848.0	28405.1
65°	2206.4	2260.3	2728.3	3496.2	4240.3	6520.0	12621.6	22189.2	28599.2	32235.5	30529.5
67.5°	1574.5	1619.8	2016.6	2741.3	3069.2	3787.4	8556.1	19790.8	28305.9	32326.1	30643.8
70°	1128.0	1153.8	1481.7	2135.3	2439.3	2275.4	4757.9	15136.5	24783.8	29850.2	28310.2
72.5°	789.4	798.1	1028.8	1626.3	1964.8	1660.7	2264.6	10091.6	18744.8	23429.3	21947.6
75°	534.8	545.7	692.3	1192.7	1576.7	1268.2	1199.1	5411.4	11004.0	12968.8	11625.1
77.5°	327.8	332.1	446.5	815.3	1179.8	966.3	772.1	2292.7	4257.5	4179.8	3563.0
80°	185.5	185.5	284.7	506.9	804.5	623.3	541.4	974.9	1348.0	1184.1	1043.9
82.5°	103.5	105.7	207.0	314.9	532.7	368.8	297.7	450.8	582.3	515.5	448.6
85°	43.2	47.5	127.2	148.8	254.5	183.4	120.7	189.8	215.7	192.0	140.2
87.5°	4.3	6.5	38.8	28.1	30.2	36.7	17.2	36.7	30.2	30.2	21.5
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°	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8
2.5°	4995.1	4962.8	4880.8	4785.9	4660.9	4600.5	4518.5	4462.4	4415.0	4419.3	4376.1
5°	5092.2	5010.3	4826.9	4598.3	4313.6	4110.9	3895.2	3746.4	3625.6	3599.7	3541.5
7.5°	5226.0	5096.5	4775.2	4363.2	3882.3	3517.7	3192.1	2982.9	2834.0	2786.6	2739.1
10°	5398.5	5210.8	4708.3	4067.7	3375.4	2911.7	2562.3	2398.4	2297.0	2262.5	2236.7
12.5°	5599.1	5342.4	4619.9	3707.5	2853.5	2407.0	2184.9	2102.9	2070.5	2059.7	2053.3
15°	5851.4	5506.3	4486.1	3280.5	2411.3	2098.6	2003.7	1992.9	1997.2	1992.9	1990.8
17.5°	6151.2	5685.4	4268.3	2840.5	2113.7	1941.1	1906.6	1915.2	1926.0	1923.8	1919.5
20°	6479.0	5862.2	3990.1	2450.2	1910.9	1829.0	1809.5	1818.1	1826.9	1822.4	1820.3
22.5°	6852.1	6052.0	3681.7	2146.0	1775.1	1725.5	1703.9	1706.0	1706.0	1697.4	1693.1
25°	7298.6	6261.2	3358.1	1930.4	1671.6	1632.7	1606.8	1598.2	1585.3	1559.3	1555.0
27.5°	7831.3	6483.3	3047.5	1779.4	1589.6	1552.9	1522.7	1501.1	1468.8	1425.7	1421.4
30°	8430.9	6752.9	2784.4	1684.5	1524.9	1488.2	1453.7	1421.4	1373.9	1320.0	1315.7
32.5°	9136.2	7042.0	2592.4	1622.0	1466.7	1427.8	1386.8	1348.0	1296.2	1242.3	1244.5
35°	9977.3	7391.4	2480.3	1578.8	1421.4	1369.6	1324.3	1281.1	1242.3	1194.8	1190.5
37.5°	10889.7	7762.3	2445.9	1557.2	1391.1	1311.4	1259.6	1229.4	1225.1	1197.0	1194.8
40°	11888.3	8202.4	2471.7	1544.3	1358.7	1255.2	1199.1	1192.7	1203.5	1153.8	1156.1
42.5°	12945.1	8724.3	2514.8	1529.2	1313.5	1199.1	1145.2	1145.2	1136.6	1067.6	1067.6
45°	14088.2	9326.1	2558.0	1492.5	1259.6	1143.1	1102.1	1087.0	1050.3	983.5	981.3
47.5°	15240.0	9938.5	2590.3	1425.7	1194.8	1095.6	1059.0	1024.5	970.6	910.2	908.0
50°	16333.5	10488.5	2555.8	1326.5	1121.6	1050.3	1011.6	964.1	905.9	864.9	858.4
52.5°	17310.5	10965.1	2409.2	1210.0	1043.9	1003.0	968.4	918.8	871.4	828.2	823.9
55°	18160.2	11351.3	2150.3	1099.9	974.9	962.0	927.4	864.9	800.2	763.5	759.2
57.5°	18975.5	11644.6	1826.9	1009.4	912.4	916.7	864.9	808.8	748.5	709.6	705.3
60°	20060.4	12037.1	1499.0	925.3	845.4	858.4	802.4	761.4	685.8	636.2	629.8
62.5°	21794.5	12647.5	1190.5	821.7	767.8	772.1	748.5	698.8	608.2	550.0	545.7
65°	23170.5	12423.2	938.2	709.6	679.4	685.8	685.8	631.9	534.8	468.0	461.6
67.5°	23015.2	10637.3	748.5	599.6	595.3	599.6	614.7	569.4	474.5	420.6	411.9
70°	21201.4	8461.2	599.6	498.3	517.6	506.9	550.0	519.8	427.0	373.1	366.6
72.5°	17299.7	6095.2	457.3	411.9	396.9	414.1	496.1	468.0	355.9	295.5	289.0
75°	10109.0	3252.4	340.8	325.6	286.9	345.1	440.0	399.0	271.7	217.8	211.4
77.5°	3291.3	1134.5	250.2	239.4	213.5	278.2	375.3	336.5	222.1	172.5	166.0
80°	882.1	343.0	170.4	157.4	138.1	207.0	297.7	267.4	159.6	112.1	110.0
82.5°	353.7	144.5	99.2	88.5	75.4	142.4	235.1	215.7	118.6	71.1	71.1
85°	114.3	47.5	36.7	28.1	34.5	88.5	140.2	146.7	84.2	36.7	28.1
87.5°	15.1	6.5	6.5	8.6	6.5	15.1	43.2	41.0	23.7	4.3	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)