

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: P968916

Luminaire Tested: **NAV-SB5C-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33740.9 lumens
Efficiency: N/A
Efficacy: 135.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
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



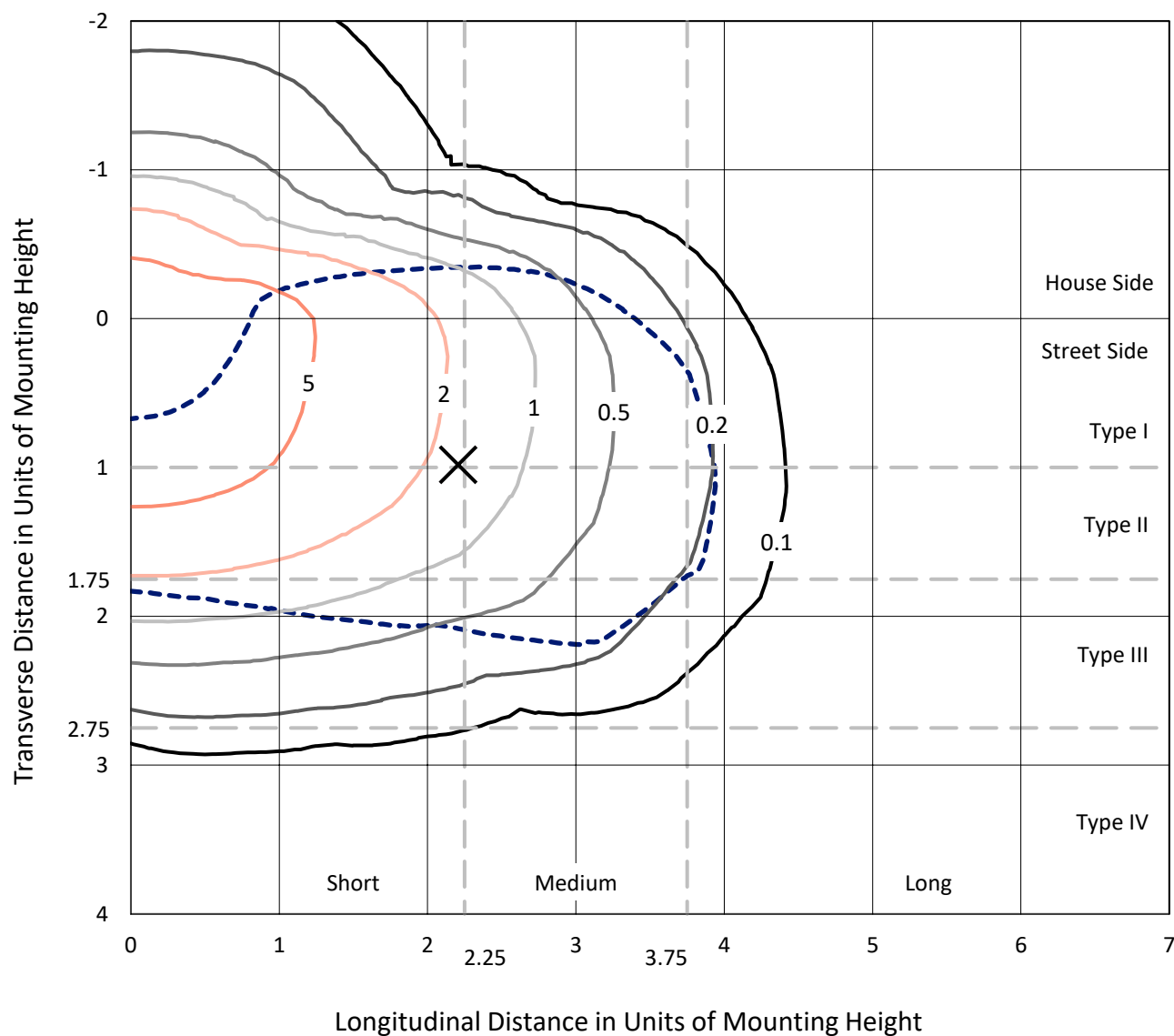
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

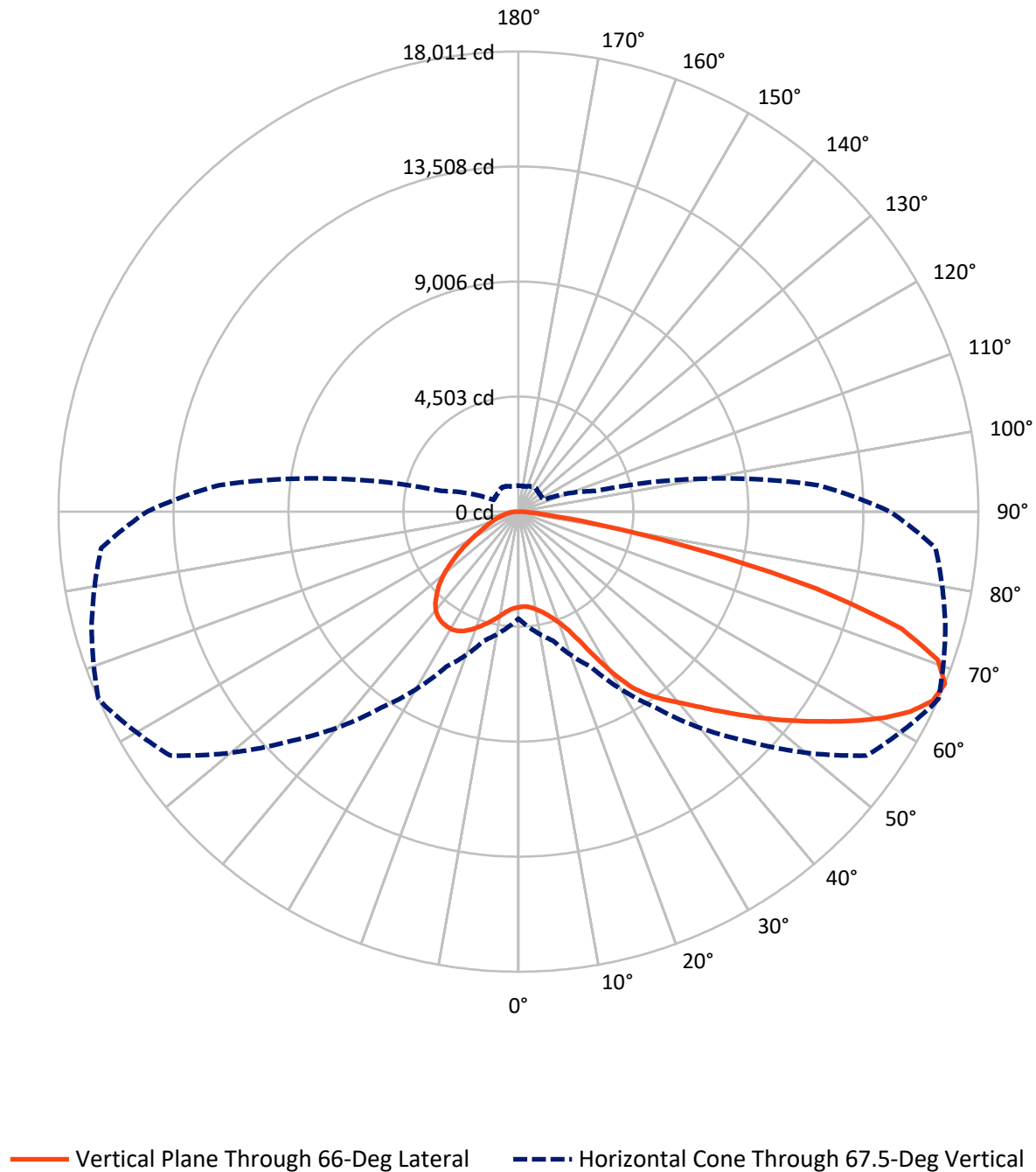


Based on 25 foot mounting height. Maximum calculated value = 8.5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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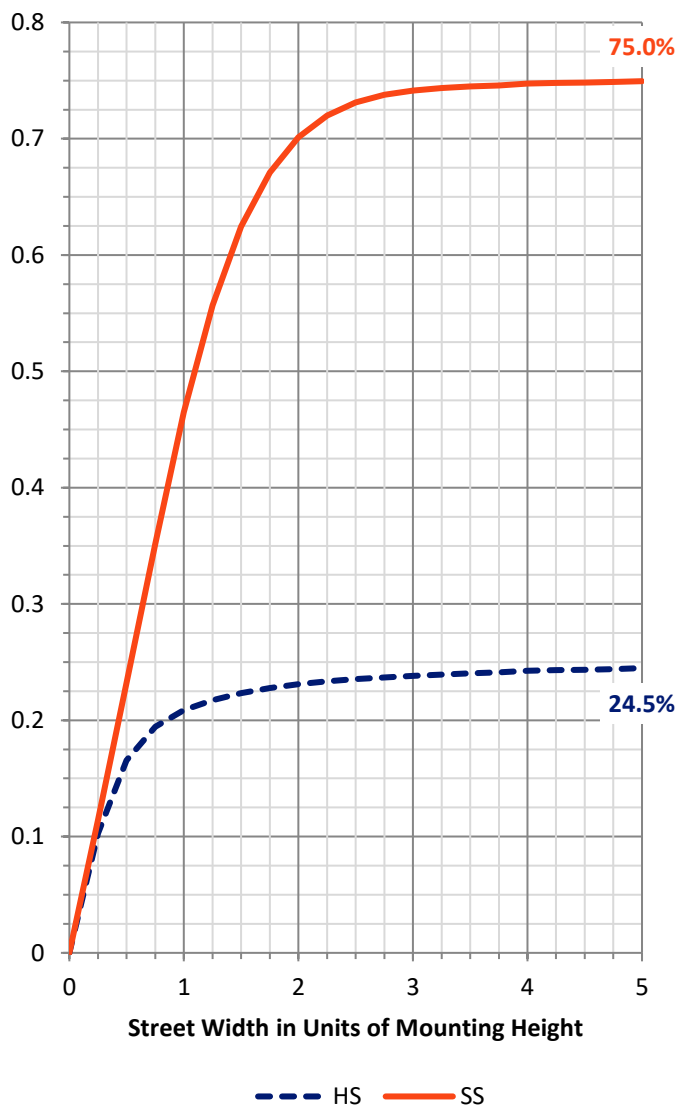
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8389.6	0.0	8389.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	25351.4	0.0	25351.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	33740.9	0.0	33740.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.0	1.1
10°-20°	1225.9	3.6
20°-30°	2362.8	7.0
30°-40°	4142.8	12.3
40°-50°	6159.0	18.3
50°-60°	7807.1	23.1
60°-70°	7639.1	22.6
70°-80°	3643.9	10.8
80°-90°	389.4	1.2
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°	33740.9	100.0
0°-180°	33740.9	100.0

Coefficient of Utilization



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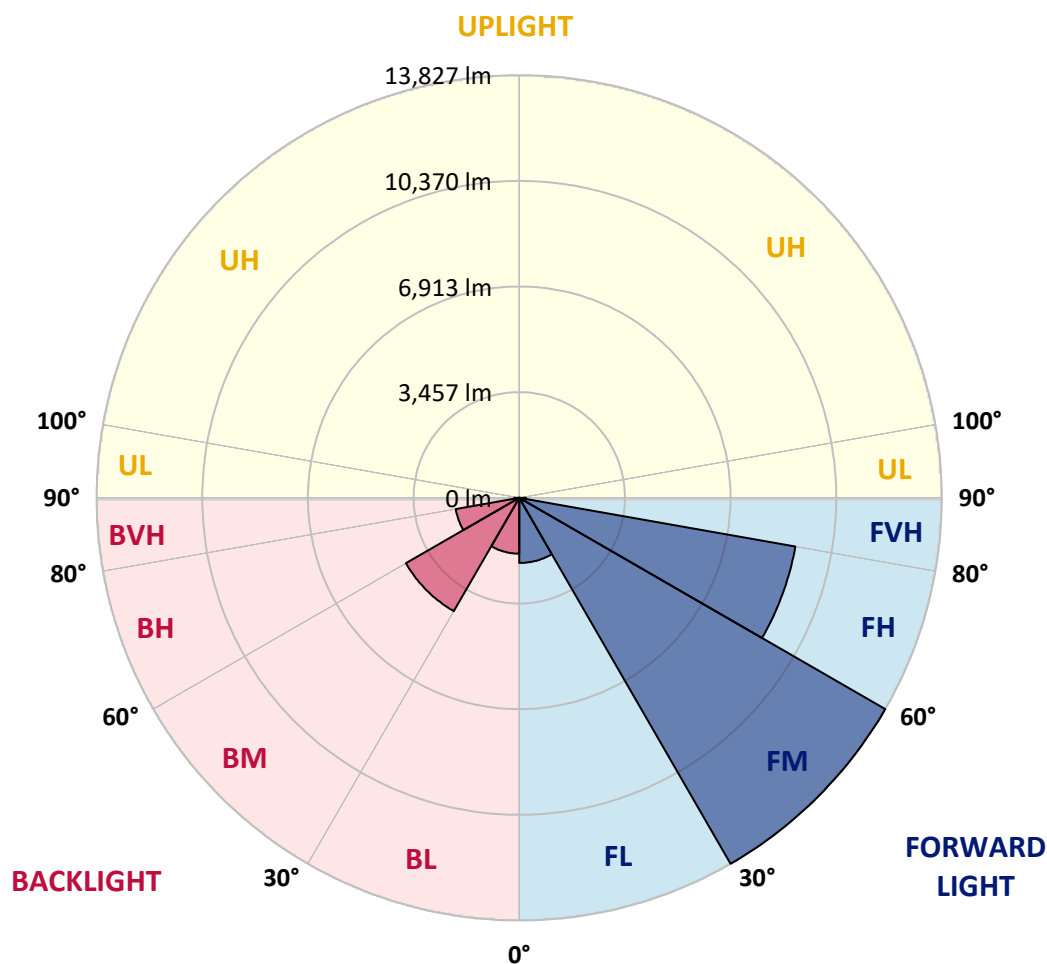
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2132.1	6.3			
FM	(30°-60°)	13826.8	41.0			
FH	(60°-80°)	9171.7	27.2			G4/12000
FVH	(80°-90°)	220.8	0.7			G2/225
BL	(0°-30°)	1827.6	5.4	B3/2500		
BM	(30°-60°)	4282.1	12.7	B3/5000		
BH	(60°-80°)	2111.2	6.3	B3/2500		G3/2500
BVH	(80°-90°)	168.6	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-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3
2.5°	3703.3	3724.5	3719.3	3710.4	3708.7	3712.1	3717.5	3722.8	3721.1	3729.9	3744.1
5°	3692.7	3714.0	3712.1	3712.1	3719.3	3733.5	3742.3	3751.2	3742.3	3752.9	3772.4
7.5°	3699.7	3715.7	3722.8	3729.9	3747.6	3774.3	3795.5	3815.0	3804.4	3816.8	3841.6
10°	3790.1	3802.5	3809.7	3809.7	3822.1	3852.3	3873.5	3908.9	3900.1	3919.6	3951.5
12.5°	3955.1	3967.5	3967.5	3960.4	3969.2	3988.7	3995.9	4034.8	4018.8	4050.8	4082.7
15°	4157.2	4182.0	4162.4	4150.0	4153.6	4173.1	4171.3	4201.5	4185.5	4212.1	4240.4
17.5°	4380.5	4412.4	4380.5	4378.7	4371.6	4392.9	4394.7	4421.3	4392.9	4412.4	4431.9
20°	4644.7	4689.0	4662.4	4671.2	4655.3	4664.2	4673.0	4712.0	4667.7	4681.9	4676.6
22.5°	5017.0	5070.2	5041.8	5075.4	5064.8	5057.8	5055.9	5125.1	5055.9	5061.2	5009.9
25°	5559.4	5623.3	5573.5	5619.7	5619.7	5642.7	5669.3	5757.9	5642.7	5609.0	5476.1
27.5°	6360.7	6424.5	6327.0	6355.4	6346.5	6403.3	6374.9	6594.7	6470.6	6415.7	6148.0
30°	7325.1	7438.5	7254.1	7247.1	7238.2	7328.6	7369.4	7514.8	7388.9	7334.0	7011.3
32.5°	8367.5	8486.3	8266.4	8202.6	8168.9	8223.9	8190.2	8307.2	8220.3	8135.2	7736.4
35°	9470.2	9587.1	9377.9	9253.9	9119.1	9003.9	8883.4	8913.5	8831.9	8702.6	8289.5
37.5°	10512.5	10727.0	10505.4	10372.5	10124.3	9899.1	9562.3	9422.3	9346.1	9227.3	8810.7
40°	11574.4	11696.7	11528.3	11414.9	11145.4	10792.6	10253.7	9957.7	9854.9	9739.6	9386.8
42.5°	12356.2	12473.2	12382.8	12304.8	12093.9	11684.3	10987.6	10617.2	10468.2	10338.8	10039.2
45°	12976.7	13063.5	13006.8	13035.1	12944.7	12547.6	11748.1	11324.4	11170.2	11012.5	10776.6
47.5°	13226.6	13318.8	13409.3	13577.7	13731.9	13439.4	12565.4	12090.3	11927.2	11765.9	11533.6
50°	13198.3	13292.2	13554.6	13912.7	14391.3	14293.8	13427.0	12905.8	12755.1	12570.7	12356.2
52.5°	12971.4	13077.8	13414.6	14010.2	14772.5	14933.8	14304.5	13747.8	13606.1	13386.2	13171.7
55°	12375.7	12439.5	12944.7	13788.6	14862.9	15380.5	15164.3	14644.9	14503.0	14196.4	13962.3
57.5°	11271.3	11363.5	12099.2	13191.1	14636.0	15683.7	15919.5	15588.0	15451.5	15010.0	14765.4
60°	9830.1	9977.1	10819.2	12187.8	14058.1	15681.9	16605.5	16515.1	16401.6	15811.3	15556.0
62.5°	8199.1	8369.2	9179.4	10769.6	13047.6	15236.9	17034.6	17291.6	17233.1	16550.6	16224.4
65°	6296.9	6413.8	7220.5	8934.7	11475.2	14281.4	17084.2	17821.7	17832.3	17112.6	16573.6
67.5°	4192.6	4529.5	5229.7	6704.6	9369.1	12719.6	16648.0	17908.5	18011.3	17305.8	16398.2
70°	2045.8	2489.0	3175.0	4357.5	6704.6	10324.6	15508.1	17195.9	17424.6	16742.0	15352.1
72.5°	849.1	992.7	1366.8	2150.3	3848.7	6967.0	13217.8	15263.6	15687.2	14834.5	12907.5
75°	572.6	620.4	781.8	1102.7	1753.3	3435.6	9532.2	11381.2	12063.7	11203.9	9158.2
77.5°	441.5	471.6	569.1	771.1	1042.4	1299.4	5102.0	6858.9	7211.6	6676.2	4765.2
80°	347.5	370.5	425.5	562.0	739.2	694.9	1739.1	3107.7	3311.6	2778.0	1531.7
82.5°	301.3	310.3	304.9	381.1	491.1	406.0	570.8	1147.0	1265.8	918.3	499.9
85°	218.0	242.8	253.5	235.7	260.6	205.6	234.0	406.0	446.7	398.8	281.9
87.5°	88.7	131.2	161.3	152.4	95.7	58.5	72.7	118.8	136.5	148.9	92.1
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°	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3	3742.3
2.5°	3745.9	3758.3	3767.2	3777.7	3784.8	3795.5	3816.8	3829.2	3830.9	3839.9	3838.0
5°	3779.6	3797.3	3816.8	3845.2	3877.1	3903.6	3944.4	3972.8	3983.5	3992.3	3990.5
7.5°	3852.3	3877.1	3912.5	3962.1	4008.3	4043.7	4093.3	4127.0	4160.7	4173.1	4174.8
10°	3960.4	3995.9	4047.2	4114.6	4164.3	4210.3	4261.7	4290.1	4323.8	4338.0	4345.1
12.5°	4095.1	4132.3	4199.7	4293.6	4339.7	4371.6	4389.4	4382.3	4389.4	4401.8	4405.3
15°	4249.3	4290.1	4366.3	4467.4	4499.3	4470.9	4431.9	4396.4	4391.1	4394.7	4407.1
17.5°	4431.9	4462.0	4550.7	4635.8	4612.7	4495.8	4410.7	4353.9	4325.6	4316.7	4329.1
20°	4687.2	4687.2	4759.9	4813.1	4658.8	4460.3	4327.3	4235.2	4176.7	4151.9	4146.5
22.5°	4997.4	4969.1	5015.1	4977.9	4650.0	4361.0	4176.7	4017.1	3928.4	3893.1	3887.7
25°	5391.0	5357.3	5344.9	5114.4	4586.2	4203.2	3903.6	3710.4	3632.4	3612.9	3616.4
27.5°	5984.9	5899.8	5738.5	5188.9	4469.1	3955.1	3584.5	3405.5	3361.2	3362.9	3368.3
30°	6775.6	6605.3	6210.0	5201.3	4277.7	3604.0	3258.4	3130.8	3109.4	3118.3	3148.4
32.5°	7507.7	7346.4	6692.2	5144.6	3983.5	3260.1	2965.8	2880.8	2848.9	2859.4	2873.7
35°	8082.0	8037.7	7138.9	5064.8	3621.7	2937.4	2703.4	2630.8	2568.8	2554.6	2565.2
37.5°	8624.6	8606.8	7474.0	4953.1	3263.7	2708.8	2492.5	2396.8	2306.4	2256.7	2258.5
40°	9220.2	9202.4	7693.9	4781.1	2946.4	2510.2	2302.9	2177.0	2065.3	1974.9	1983.7
42.5°	9890.3	9785.7	7798.4	4534.7	2676.9	2341.8	2148.6	1978.5	1831.3	1747.9	1753.3
45°	10622.5	10386.6	7796.7	4221.0	2450.0	2187.6	1983.7	1742.6	1606.2	1528.2	1524.6
47.5°	11398.9	10961.0	7700.9	3873.5	2230.2	2017.4	1728.5	1544.1	1453.7	1405.8	1395.1
50°	12200.2	11498.1	7537.8	3474.6	2005.0	1824.2	1568.9	1443.0	1373.9	1329.5	1313.6
52.5°	12953.6	11985.7	7341.0	3022.6	1776.3	1636.3	1498.0	1400.5	1327.8	1278.2	1256.9
55°	13653.9	12405.9	7062.8	2559.8	1590.2	1510.4	1464.3	1382.7	1299.4	1241.0	1217.9
57.5°	14276.1	12678.8	6582.3	2125.5	1457.2	1423.5	1428.8	1352.6	1256.9	1207.2	1175.4
60°	14793.7	12879.1	5871.4	1723.1	1349.1	1338.4	1373.9	1295.9	1184.2	1127.5	1102.7
62.5°	15104.0	12875.6	4999.2	1411.1	1256.9	1260.4	1301.2	1225.0	1111.5	1058.3	1042.4
65°	15077.4	12560.0	4041.9	1207.2	1168.3	1171.8	1225.0	1147.0	1051.2	1019.4	1017.6
67.5°	14543.8	11790.7	3100.6	1074.3	1070.7	1086.7	1148.7	1093.8	1014.0	1010.4	1015.8
70°	13099.0	10193.4	2233.7	967.9	969.8	992.7	1074.3	1060.2	994.6	1001.6	999.9
72.5°	10503.7	7771.9	1499.8	856.3	858.0	895.2	1003.4	1033.5	975.0	1069.0	1083.1
75°	6995.3	4846.7	964.4	737.5	739.2	787.1	941.4	982.2	921.9	1065.4	1074.3
77.5°	3361.2	2178.7	698.4	620.4	620.4	664.8	813.7	879.2	785.4	827.9	758.7
80°	1161.1	819.0	549.6	499.9	489.3	519.5	686.0	762.3	677.2	624.0	585.0
82.5°	457.4	425.5	441.5	388.3	352.8	372.3	533.6	629.3	498.2	450.3	448.5
85°	262.4	276.5	312.0	257.1	203.9	228.7	391.8	452.0	375.9	331.5	338.6
87.5°	70.9	97.5	143.6	132.9	92.1	97.5	186.1	250.0	216.3	166.7	172.0
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)