

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: P968817

Luminaire Tested: **NAV-SB5C-740-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-740-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31352.7 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - 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

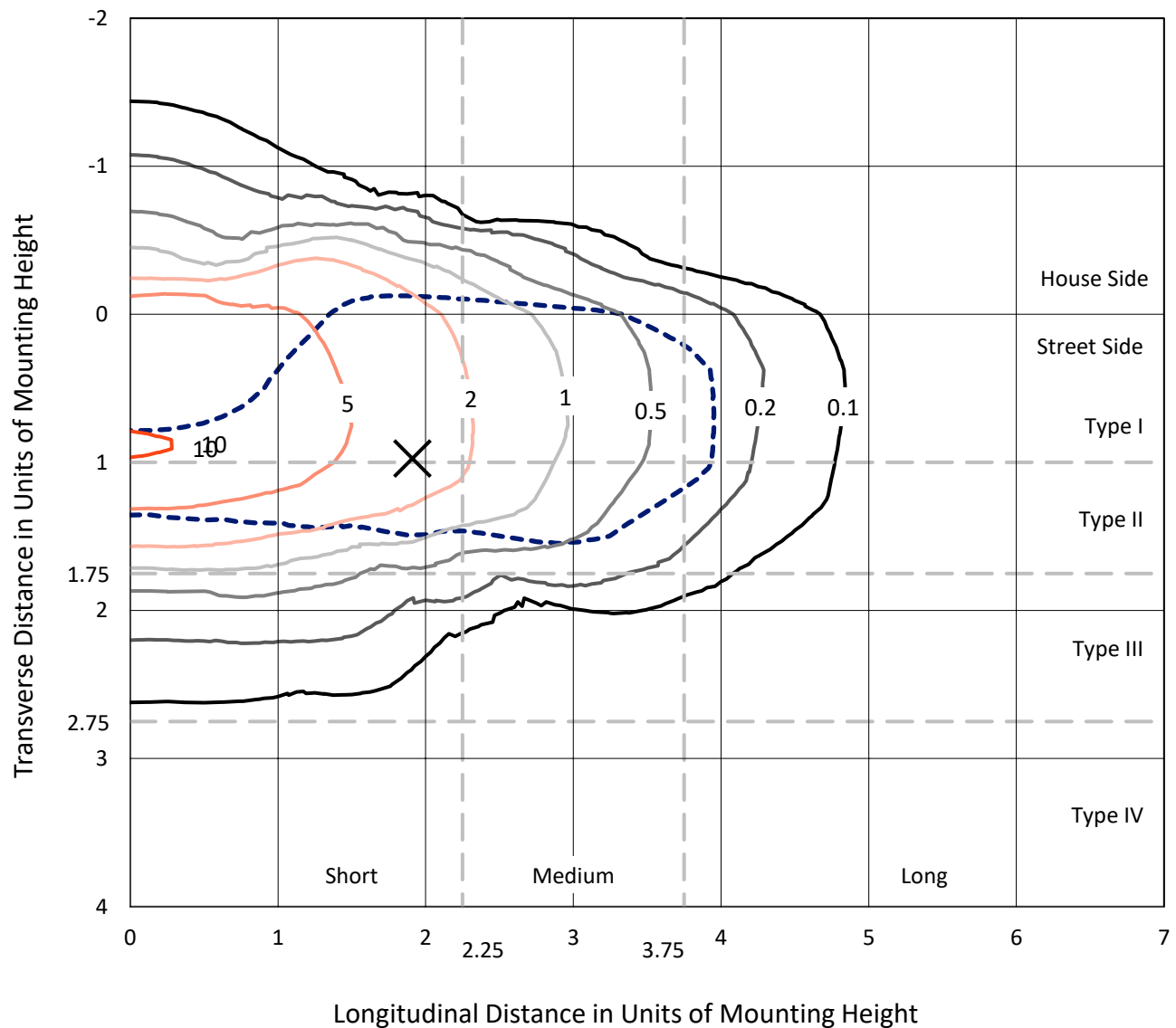


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Iso-Footcandle Lines of Horizontal Illumination

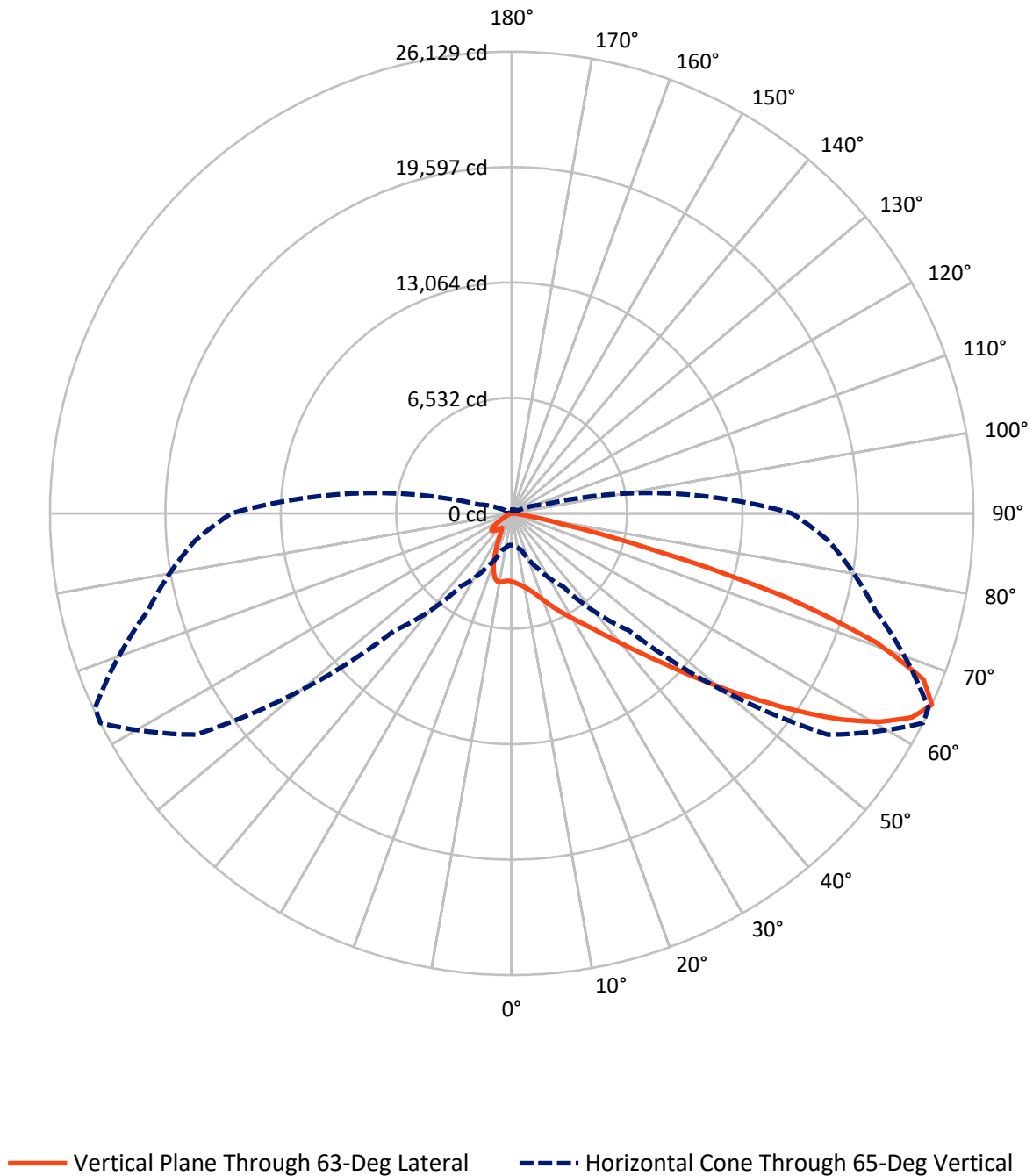
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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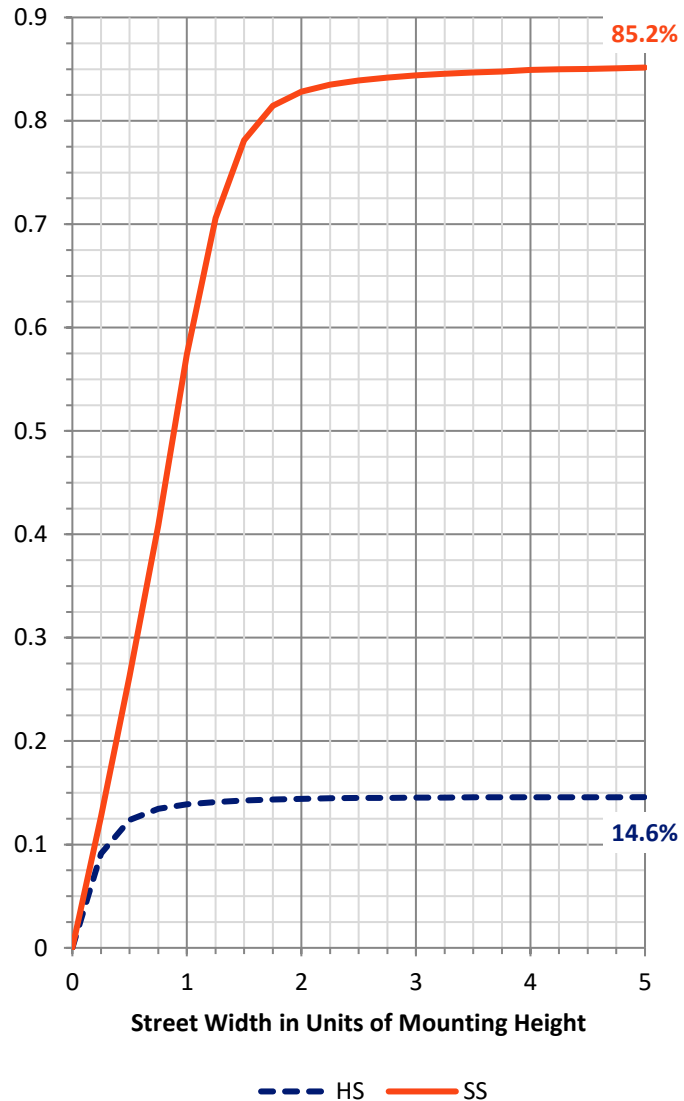
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4608.6	0.0	4608.6
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	26744.1	0.0	26744.1
	% Fixture	85.3	0.0	85.3
Total	Lumens	31352.7	0.0	31352.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.6	1.2
10°-20°	1011.6	3.2
20°-30°	1761.4	5.6
30°-40°	3174.8	10.1
40°-50°	6296.6	20.1
50°-60°	8577.0	27.4
60°-70°	6846.1	21.8
70°-80°	3098.0	9.9
80°-90°	222.7	0.7
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°	31352.7	100.0
0°-180°	31352.7	100.0

Coefficient of Utilization



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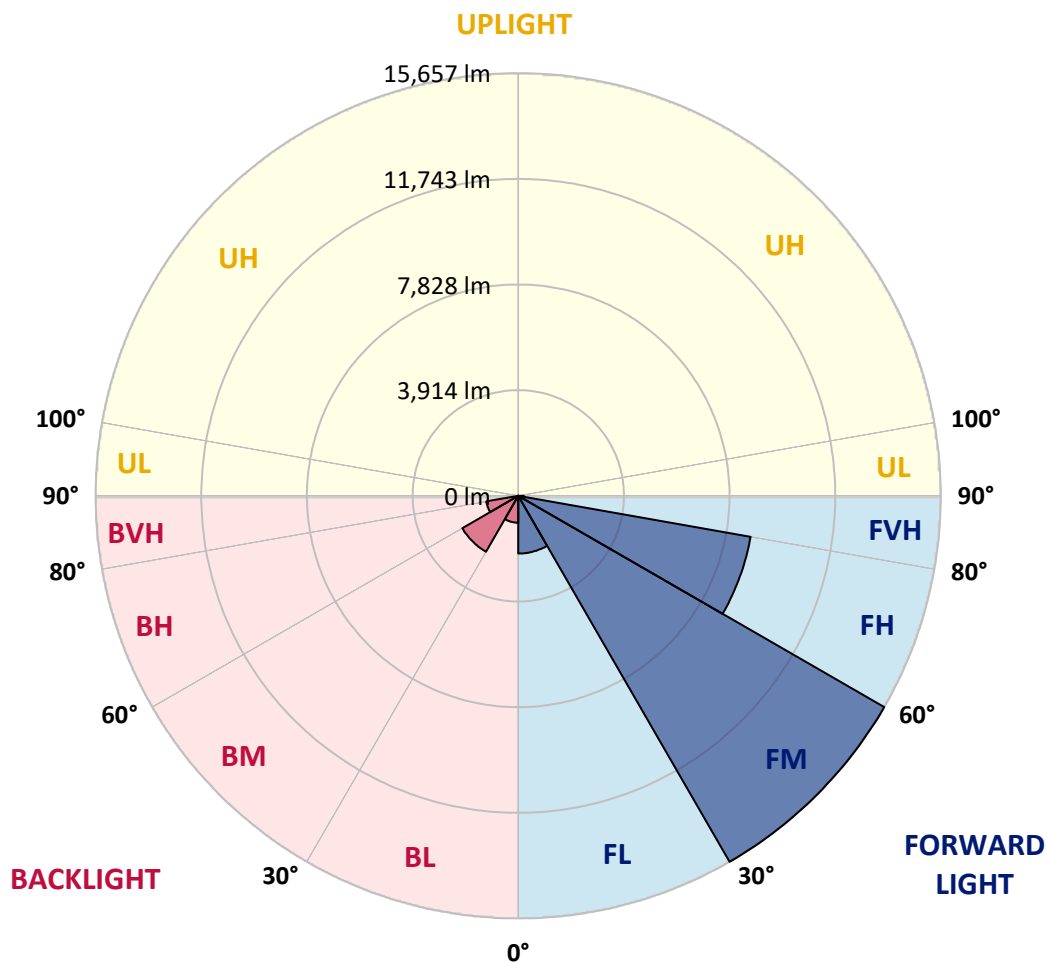
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2140.2	6.8			
FM	(30°-60°)	15656.8	49.9			
FH	(60°-80°)	8741.0	27.9			G4/12000
FVH	(80°-90°)	206.2	0.7			G2/225
BL	(0°-30°)	997.4	3.2	B2/1000		
BM	(30°-60°)	2391.6	7.6	B2/2500		
BH	(60°-80°)	1203.1	3.8	B3/2500		G3/2500
BVH	(80°-90°)	16.5	0.1			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5
2.5°	3960.1	3949.3	3964.4	3957.9	3953.6	3945.0	3940.7	3936.4	3927.8	3921.2	3895.4
5°	3970.8	3964.4	3979.6	3992.5	4005.4	4018.3	4024.8	4033.5	4024.8	4007.5	3981.7
7.5°	3880.3	3876.0	3908.3	3947.2	4005.4	4055.0	4108.9	4139.2	4141.3	4134.8	4106.8
10°	3873.8	3863.0	3895.4	3942.9	4018.3	4106.8	4201.7	4266.4	4275.0	4303.1	4272.8
12.5°	3975.2	3964.4	4009.7	4061.5	4139.2	4231.9	4348.4	4439.0	4451.9	4490.7	4469.1
15°	4145.6	4130.5	4182.3	4249.1	4348.4	4454.0	4577.0	4658.9	4669.7	4717.2	4678.4
17.5°	4344.1	4329.0	4389.4	4460.5	4568.3	4712.8	4855.2	4945.8	4958.7	4989.0	4917.7
20°	4598.6	4579.2	4626.6	4691.3	4805.6	4978.2	5148.6	5278.0	5275.8	5275.8	5159.3
22.5°	4894.1	4863.8	4904.8	4956.6	5064.4	5273.6	5500.2	5653.3	5653.3	5592.9	5400.9
25°	5211.1	5181.0	5226.2	5273.6	5368.5	5605.8	5871.1	6060.9	6069.5	5966.0	5659.7
27.5°	5608.0	5569.1	5603.7	5659.7	5715.8	5957.4	6272.3	6492.3	6496.7	6337.1	5905.6
30°	6371.5	6261.5	6153.7	6093.3	6119.1	6358.6	6695.1	6938.8	6960.4	6740.4	6173.1
32.5°	7769.2	7747.7	7368.0	6871.9	6613.1	6790.0	7167.4	7460.8	7473.7	7191.2	6520.3
35°	9941.3	9915.3	9304.9	8360.2	7516.8	7368.0	7741.2	8088.5	8079.9	7760.6	6971.1
37.5°	12533.9	12510.1	11705.6	10441.7	9076.3	8241.6	8481.1	8845.5	8899.5	8481.1	7553.5
40°	14749.0	14660.6	14151.6	12932.9	11147.0	9691.1	9533.6	9775.1	9831.3	9335.2	8293.4
42.5°	16427.1	16351.6	16092.8	15331.4	13653.3	11835.1	10773.8	10866.5	10929.2	10333.8	9143.2
45°	17296.4	17279.0	17382.7	17311.4	16207.1	14466.4	12546.8	12160.7	12184.5	11440.3	10107.3
47.5°	17419.3	17410.6	17883.1	18551.7	18402.8	17434.4	14822.3	13774.1	13690.0	12689.2	11155.6
50°	16694.6	16677.3	17583.3	18836.4	19869.5	19927.7	17406.3	15592.4	15406.9	13981.2	12249.2
52.5°	14380.2	14375.8	15864.1	17949.9	20385.1	22110.6	19960.1	17589.7	17279.0	15348.7	13405.3
55°	11065.0	11144.8	12850.9	15316.3	19444.7	23161.0	22253.0	19807.0	19330.4	16724.7	14470.7
57.5°	7838.3	7954.7	9641.5	11837.2	16528.4	22539.9	23803.8	22028.6	21515.3	18096.6	15551.4
60°	4210.3	4313.8	6002.7	8623.3	12296.6	20223.2	24621.2	23956.9	23471.6	19399.4	16526.3
62.5°	2508.5	2543.0	3241.9	5567.0	8317.1	15450.0	24273.9	25425.7	25026.7	20492.9	17374.0
65°	1801.0	1807.5	2159.1	3399.3	5049.4	9386.9	21838.9	26128.9	26006.0	21316.8	18001.7
67.5°	1516.3	1512.0	1658.7	2258.3	3440.3	4702.1	16737.7	25134.6	25656.6	21838.9	18357.5
70°	1300.6	1307.1	1479.7	1654.4	2586.2	2661.6	8321.4	21884.2	22997.1	21976.8	18336.0
72.5°	968.4	990.0	1149.6	1507.7	1952.0	1831.3	2873.0	16226.5	18239.0	20706.4	17384.8
75°	683.8	694.5	808.8	1268.2	1455.9	1333.0	1466.7	8388.3	10967.9	15874.9	14229.3
77.5°	526.3	545.7	612.5	886.5	1434.4	936.1	897.3	2903.2	4460.5	9589.7	9755.7
80°	284.7	319.2	442.2	640.6	1007.3	662.2	444.3	1156.1	1512.0	4484.3	3761.6
82.5°	146.7	163.9	308.4	461.6	573.7	578.1	220.0	481.0	623.3	1384.8	515.5
85°	58.2	71.1	207.0	254.5	295.5	284.7	99.2	194.1	224.3	384.0	157.4
87.5°	12.9	21.5	75.5	58.2	56.1	60.4	23.7	45.3	43.2	45.3	28.1
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°	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5	3869.5
2.5°	3893.3	3884.6	3860.9	3835.0	3804.8	3787.6	3776.8	3774.6	3759.5	3748.7	3759.5
5°	3957.9	3949.3	3904.0	3850.1	3791.9	3746.6	3703.4	3664.6	3608.5	3597.7	3593.4
7.5°	4087.4	4063.6	3990.3	3916.9	3807.0	3675.3	3515.7	3332.5	3168.5	3118.9	3095.2
10°	4247.0	4214.6	4121.8	3992.5	3748.7	3390.7	3004.6	2646.5	2361.8	2282.1	2251.8
12.5°	4428.2	4400.1	4277.2	4037.8	3505.0	2855.8	2264.7	1820.4	1544.4	1475.3	1455.9
15°	4643.9	4602.9	4432.5	3968.7	3069.3	2169.8	1555.1	1292.0	1192.8	1179.9	1166.9
17.5°	4872.4	4805.6	4570.5	3720.6	2482.7	1542.2	1201.4	1126.0	1082.8	1069.8	1063.3
20°	5081.7	4995.4	4652.5	3345.4	1854.9	1201.4	1076.4	1026.7	987.9	972.7	964.1
22.5°	5290.9	5167.9	4652.5	2834.2	1391.2	1065.5	987.9	942.6	897.3	877.9	867.0
25°	5508.8	5344.9	4570.5	2264.7	1119.4	977.1	903.7	854.1	815.3	791.6	783.0
27.5°	5720.1	5493.7	4382.9	1725.6	996.5	899.4	826.2	778.7	742.0	724.7	724.7
30°	5920.7	5640.4	4119.7	1309.2	916.7	823.9	754.9	713.9	677.3	660.0	662.2
32.5°	6192.5	5825.8	3839.3	1074.1	847.7	752.8	690.2	651.4	619.0	606.1	606.1
35°	6569.9	6099.8	3597.7	1054.7	789.5	694.5	632.0	595.3	562.9	552.2	552.2
37.5°	7104.9	6542.0	3470.4	1184.2	742.0	642.8	584.6	545.7	515.5	506.9	504.7
40°	7764.9	7141.6	3539.5	1313.5	709.6	597.5	541.4	502.6	476.7	465.9	463.7
42.5°	8547.9	7881.4	3921.2	1412.8	688.1	558.6	500.4	457.3	440.0	435.7	435.7
45°	9447.3	8694.6	4505.8	1518.4	653.5	521.9	459.4	427.1	414.1	411.9	409.8
47.5°	10469.7	9587.5	5183.1	1650.0	619.0	487.5	427.1	405.5	394.7	390.4	390.4
50°	11483.5	10487.0	5879.8	1723.3	591.0	455.1	401.2	384.0	375.4	373.1	373.1
52.5°	12544.7	11412.2	6442.7	1654.4	567.2	429.3	379.7	366.6	358.0	355.9	355.9
55°	13556.2	12160.7	6539.8	1404.1	519.8	403.3	355.9	349.4	338.7	338.7	336.5
57.5°	14427.6	12536.1	5853.9	1031.0	472.3	364.5	332.2	325.7	317.0	314.9	312.7
60°	15227.8	12428.2	4518.7	694.5	420.6	325.7	302.0	297.7	289.0	278.3	276.1
62.5°	15678.6	11953.7	3090.9	452.9	368.8	284.7	267.4	265.3	245.9	224.3	220.0
65°	15849.1	10978.8	1928.3	330.0	308.4	243.7	230.8	226.5	198.4	174.7	172.5
67.5°	15700.2	9373.9	972.7	261.0	243.7	202.7	189.8	189.8	170.4	148.8	146.7
70°	15104.9	7027.3	409.8	209.2	187.7	155.3	155.3	163.9	144.5	120.7	118.6
72.5°	13812.9	4728.0	217.8	159.6	140.2	110.0	127.3	133.8	114.3	90.6	90.6
75°	10980.9	2883.8	151.0	118.6	88.5	77.7	97.1	101.4	77.7	60.4	58.2
77.5°	7510.4	1656.5	101.4	75.5	56.1	45.3	66.8	62.5	41.0	28.1	30.2
80°	3297.9	690.2	58.2	34.5	21.5	17.2	23.7	17.2	12.9	8.6	8.6
82.5°	386.1	161.7	21.5	12.9	8.6	4.3	2.2	0.0	0.0	0.0	0.0
85°	79.8	19.4	10.8	4.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.1	4.3	2.2	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)