

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: P965133

Luminaire Tested: **NAV-SB3D-740-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965133
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33990 lumens
Efficiency: N/A
Efficacy: 155.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
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



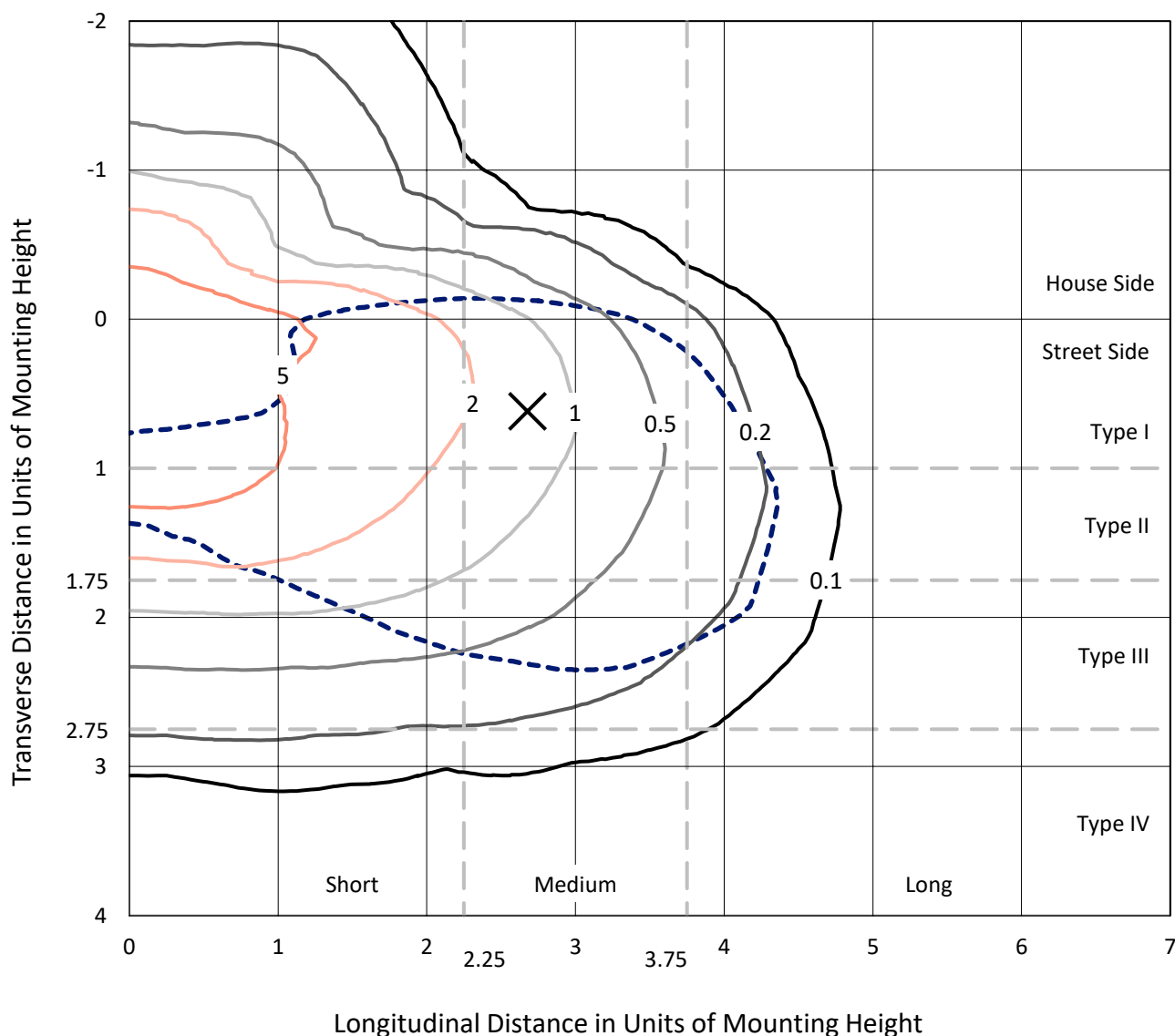
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

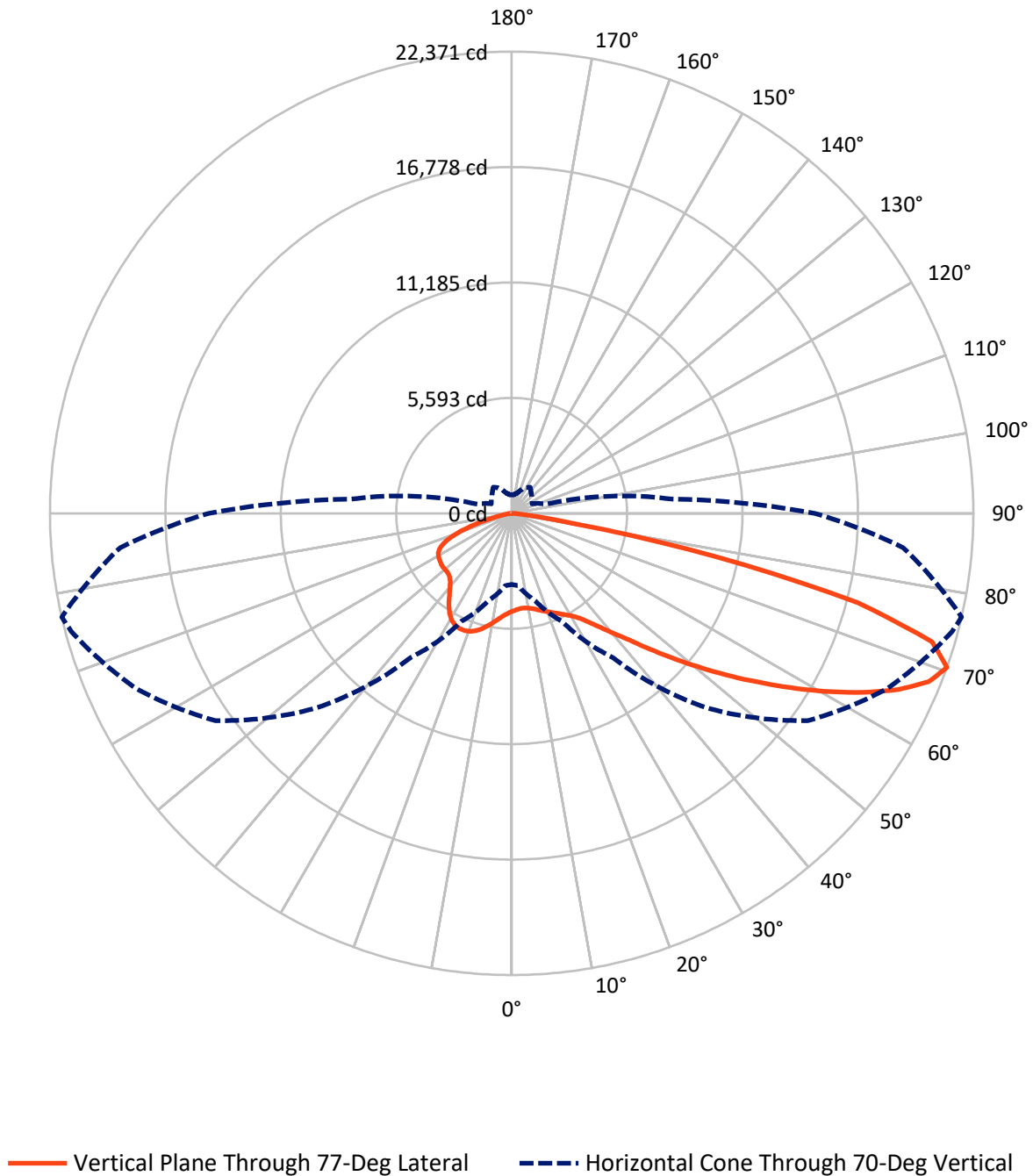


Based on 25 foot mounting height. Maximum calculated value = 9 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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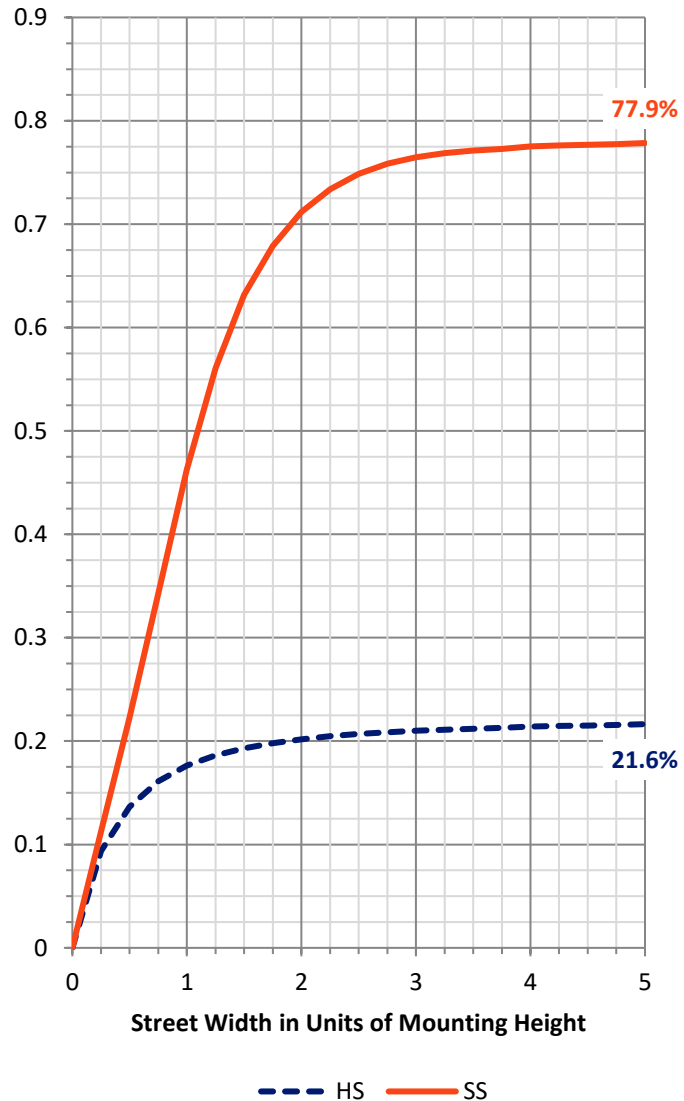
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7443.3	0.0	7443.3
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	26546.7	0.0	26546.7
	% Fixture	78.1	0.0	78.1
Total	Lumens	33990.0	0.0	33990.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	452.2	1.3
10°-20°	1305.2	3.8
20°-30°	2232.1	6.6
30°-40°	3589.5	10.6
40°-50°	5604.2	16.5
50°-60°	7485.9	22.0
60°-70°	7978.8	23.5
70°-80°	4911.7	14.5
80°-90°	430.4	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°	33990.0	100.0
0°-180°	33990.0	100.0

Coefficient of Utilization



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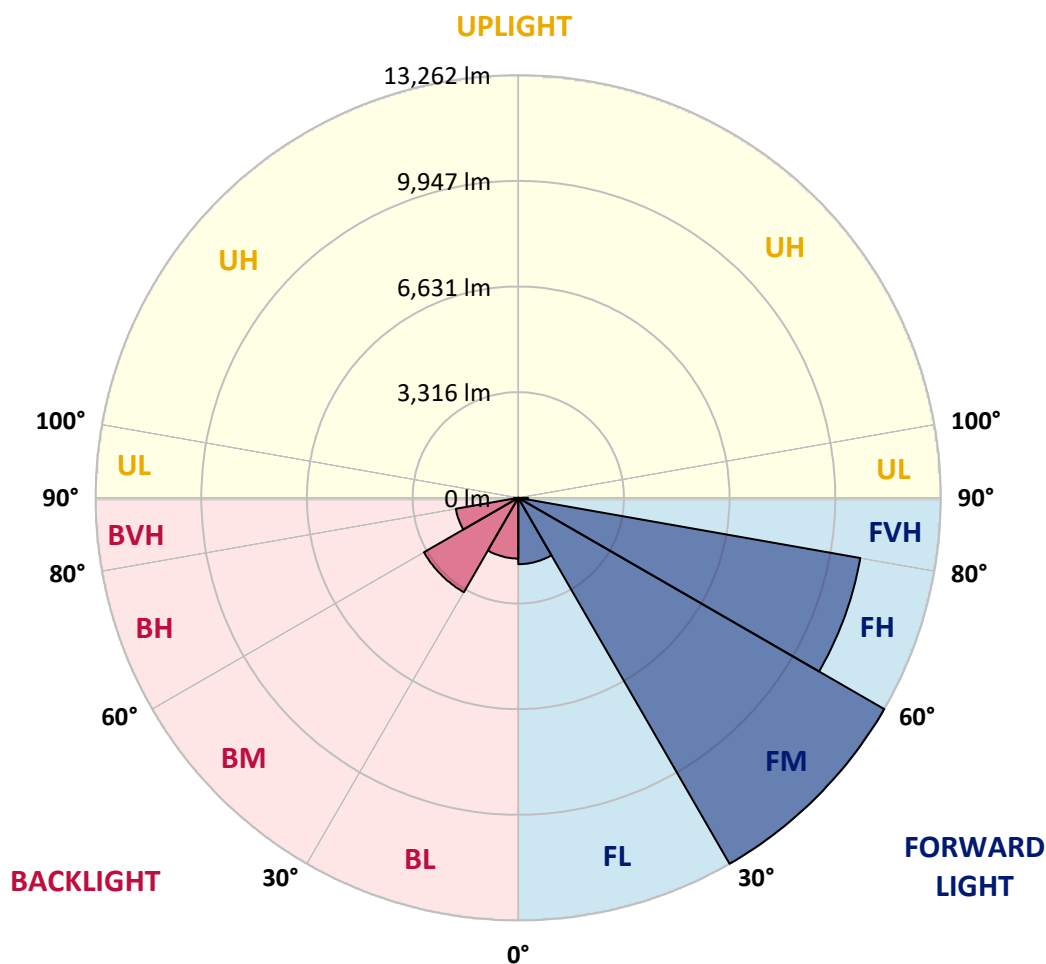
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2082.4	6.1			
FM	(30°-60°)	13262.2	39.0			
FH	(60°-80°)	10901.2	32.1			G4/12000
FVH	(80°-90°)	301.0	0.9			G3/500
BL	(0°-30°)	1907.2	5.6	B3/2500		
BM	(30°-60°)	3417.4	10.1	B3/5000		
BH	(60°-80°)	1989.3	5.9	B3/2500		G3/2500
BVH	(80°-90°)	129.4	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0
2.5°	4371.1	4369.4	4392.0	4399.0	4440.8	4470.3	4526.1	4585.2	4661.8	4670.5	4717.6
5°	4118.8	4118.8	4144.8	4172.7	4226.7	4285.8	4371.1	4473.8	4606.1	4627.1	4743.7
7.5°	3904.6	3918.5	3941.1	3995.1	4057.8	4143.0	4273.6	4419.9	4593.9	4627.1	4815.0
10°	3732.2	3747.9	3775.8	3819.3	3913.3	4031.6	4202.3	4390.3	4623.6	4675.7	4919.5
12.5°	3678.3	3694.0	3709.6	3742.7	3829.7	3969.0	4172.7	4404.2	4694.9	4747.2	5062.3
15°	3803.7	3822.7	3810.6	3801.9	3847.1	3974.2	4186.6	4454.6	4783.7	4858.6	5238.1
17.5°	4092.6	4099.6	4071.7	3989.9	3982.9	4050.8	4252.7	4524.3	4895.1	4976.9	5415.6
20°	4559.1	4546.9	4489.5	4327.7	4235.3	4221.5	4365.9	4628.8	5010.0	5097.0	5607.1
22.5°	5192.8	5178.8	5064.0	4808.1	4602.7	4466.8	4529.6	4764.5	5138.8	5236.3	5793.4
25°	5983.1	5964.0	5795.1	5447.0	5128.4	4792.4	4752.4	4943.9	5297.2	5387.7	5988.4
27.5°	6905.7	6890.0	6707.3	6247.7	5788.2	5238.1	5029.2	5154.5	5462.6	5565.3	6207.7
30°	7897.9	7943.2	7619.4	7125.1	6543.6	5819.4	5401.6	5413.8	5676.8	5769.0	6474.0
32.5°	9064.3	9142.7	8752.7	8126.0	7332.2	6451.3	5871.7	5776.0	5988.4	6064.9	6810.0
35°	10220.2	10308.9	9985.1	9292.3	8378.5	7196.4	6362.6	6192.0	6402.7	6486.2	7255.7
37.5°	11219.4	11337.7	11170.7	10568.4	9497.8	8094.7	7003.2	6681.2	6912.7	7017.2	7854.5
40°	12008.0	12189.0	12176.8	11800.8	10817.2	9184.4	7816.1	7285.2	7546.4	7659.5	8580.4
42.5°	12648.6	12805.2	12941.0	12921.9	12194.2	10422.1	8771.8	8070.3	8268.8	8399.4	9396.8
45°	13090.8	13257.9	13550.3	13865.4	13519.0	11746.9	9866.9	9001.7	9182.7	9379.4	10369.9
47.5°	13485.9	13675.7	14055.1	14554.8	14643.6	13076.8	11066.2	10086.1	10251.5	10455.2	11346.4
50°	13520.8	13684.4	14272.7	14981.3	15442.5	14354.6	12354.4	11303.0	11457.9	11675.5	12392.7
52.5°	12680.0	12937.6	13964.6	14969.1	15809.9	15423.4	13633.9	12568.6	12742.6	13003.8	13475.5
55°	9842.5	10220.2	13061.2	14502.5	15679.3	16114.5	14850.7	13914.2	14137.0	14410.3	14565.2
57.5°	8477.7	8643.0	10368.2	13653.0	15084.0	16293.8	15877.8	15273.7	15632.3	15931.8	15717.7
60°	7619.4	7757.0	8777.1	12331.8	14300.6	16010.1	16671.5	16541.0	17160.8	17517.6	16896.1
62.5°	6700.3	6830.9	7758.7	10296.7	13297.9	15538.3	17173.0	17710.9	18727.5	19117.4	18006.8
65°	5788.2	5899.6	6789.1	8651.7	12023.7	15066.6	17432.3	18722.2	20177.5	20581.4	18929.4
67.5°	4771.5	4863.7	5704.5	7299.1	10474.4	14420.7	17561.1	19517.7	21439.6	21786.1	19385.4
70°	3443.3	3514.6	4383.3	5772.5	8529.8	13310.1	17508.8	20081.8	22094.2	22370.9	19040.8
72.5°	1627.6	1692.1	2712.1	3747.9	6024.8	11148.0	16452.3	19634.4	21429.2	21291.6	16930.9
75°	868.7	924.3	1558.0	2055.8	3182.2	7642.1	13463.3	16913.5	17994.6	17326.1	12512.8
77.5°	588.3	631.9	964.4	1234.2	1453.6	3627.8	8653.5	11710.3	11266.4	10162.8	6266.8
80°	466.6	511.8	790.3	835.6	703.3	1310.8	3575.6	5420.8	3894.2	3114.3	1782.6
82.5°	358.6	409.1	665.0	605.8	382.9	537.9	1041.0	1714.7	997.4	759.0	431.7
85°	219.4	273.3	522.2	386.4	215.9	245.5	353.4	476.9	304.6	254.2	155.0
87.5°	111.4	156.7	264.6	141.0	97.5	57.4	94.0	94.0	80.1	69.6	40.1
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°	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0	4742.0
2.5°	4759.3	4794.1	4853.4	4909.0	4952.6	4994.3	5036.1	5058.8	5065.8	5093.5	5109.2
5°	4815.0	4879.4	4994.3	5102.2	5170.2	5211.9	5241.5	5259.0	5262.5	5271.2	5285.0
7.5°	4917.7	5020.4	5180.6	5288.5	5339.0	5335.5	5323.3	5279.8	5262.5	5246.8	5250.3
10°	5062.3	5198.0	5394.7	5469.6	5438.2	5354.7	5246.8	5119.7	5060.5	5003.0	4985.6
12.5°	5241.5	5413.8	5607.1	5603.6	5448.7	5234.6	4983.9	4788.9	4665.3	4576.5	4555.6
15°	5459.2	5657.6	5805.5	5687.2	5347.7	4963.0	4595.7	4341.5	4230.2	4132.6	4122.2
17.5°	5683.7	5896.1	5964.0	5661.1	5093.5	4560.8	4144.8	3944.6	3834.9	3782.8	3798.4
20°	5903.1	6113.6	6058.0	5511.3	4707.1	4104.8	3734.0	3624.3	3601.7	3613.8	3608.6
22.5°	6134.5	6322.5	6077.1	5222.4	4214.5	3638.2	3434.6	3438.1	3488.6	3525.1	3533.8
25°	6371.3	6498.4	6026.6	4804.6	3685.3	3295.3	3244.8	3300.5	3399.7	3471.2	3490.3
27.5°	6599.4	6655.0	5916.9	4287.6	3230.9	3049.9	3058.6	3173.5	3323.2	3422.4	3446.8
30°	6856.9	6794.3	5706.3	3706.2	2915.8	2839.2	2912.3	3046.4	3196.1	3284.9	3305.7
32.5°	7147.7	6914.4	5372.1	3168.3	2693.0	2670.3	2790.5	2877.5	2943.7	2969.8	2983.7
35°	7509.8	7083.3	4943.9	2790.5	2492.8	2546.8	2661.7	2618.2	2592.0	2578.1	2592.0
37.5°	7979.8	7311.3	4442.5	2545.1	2331.0	2458.0	2505.0	2369.2	2266.5	2216.0	2228.2
40°	8545.5	7645.6	3960.3	2355.2	2228.2	2381.4	2299.6	2136.0	2005.4	1934.0	1939.2
42.5°	9174.0	7995.4	3554.7	2212.6	2170.7	2318.8	2148.1	1953.1	1742.5	1720.0	1742.5
45°	9833.7	8355.8	3278.0	2102.9	2142.9	2264.7	2061.1	1746.0	1596.3	1688.6	1737.3
47.5°	10493.5	8686.6	3110.8	2021.1	2129.0	2203.9	1984.5	1631.1	1524.9	1659.0	1721.7
50°	11228.2	8982.5	3035.9	1961.8	2113.3	2179.5	1869.6	1601.6	1450.1	1538.8	1605.0
52.5°	11957.5	9212.3	2980.2	1902.7	2090.7	2160.3	1813.9	1566.7	1359.6	1364.8	1401.4
55°	12685.2	9361.9	2919.3	1824.4	2040.2	2118.6	1808.7	1528.4	1291.7	1267.3	1284.7
57.5°	13461.5	9447.3	2844.5	1737.3	1953.1	2012.4	1803.5	1498.9	1270.8	1230.7	1235.9
60°	14251.9	9572.6	2747.0	1631.1	1836.5	1885.3	1791.3	1488.4	1258.6	1190.7	1196.0
62.5°	14960.4	9616.1	2630.4	1530.1	1686.8	1759.9	1765.2	1479.7	1225.5	1108.8	1108.8
65°	15425.1	9428.2	2426.7	1415.2	1524.9	1631.1	1714.7	1450.1	1166.3	1049.7	1049.7
67.5°	15406.1	8892.0	2108.1	1267.3	1368.3	1488.4	1641.5	1399.6	1095.0	976.6	981.8
70°	14688.8	7833.6	1704.3	1095.0	1196.0	1335.2	1547.5	1324.7	1009.6	896.5	906.9
72.5°	12598.1	6131.0	1237.7	893.0	995.7	1176.8	1425.7	1234.2	922.6	825.1	819.9
75°	8999.9	3880.2	839.1	685.8	774.7	997.4	1274.3	1128.0	842.6	828.6	781.7
77.5°	4597.4	1853.9	555.3	501.3	539.7	786.8	1070.6	1007.9	854.7	684.1	609.3
80°	1495.4	684.1	349.9	341.2	358.6	524.0	828.6	826.9	647.6	464.8	410.8
82.5°	476.9	294.2	228.1	219.4	210.6	329.0	577.9	654.6	437.0	294.2	292.4
85°	189.7	175.8	134.1	123.6	88.8	155.0	302.9	435.2	325.5	212.4	217.6
87.5°	69.6	69.6	36.6	26.1	19.2	52.3	81.8	130.6	186.2	109.7	107.9
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)