

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: P965103

Luminaire Tested: **NAV-SB3D-735-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965103
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-SB3D-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31315.8 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
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



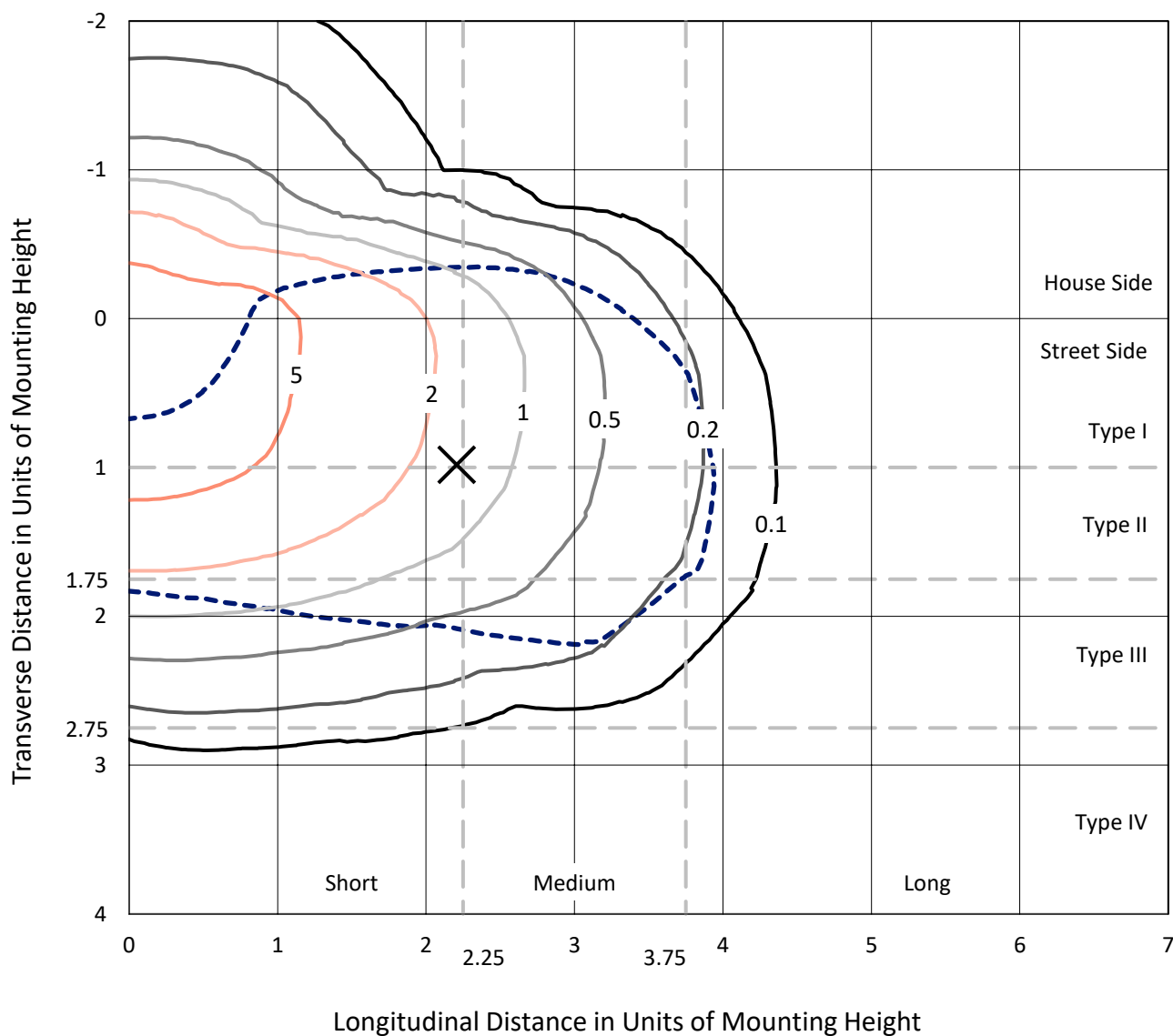
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

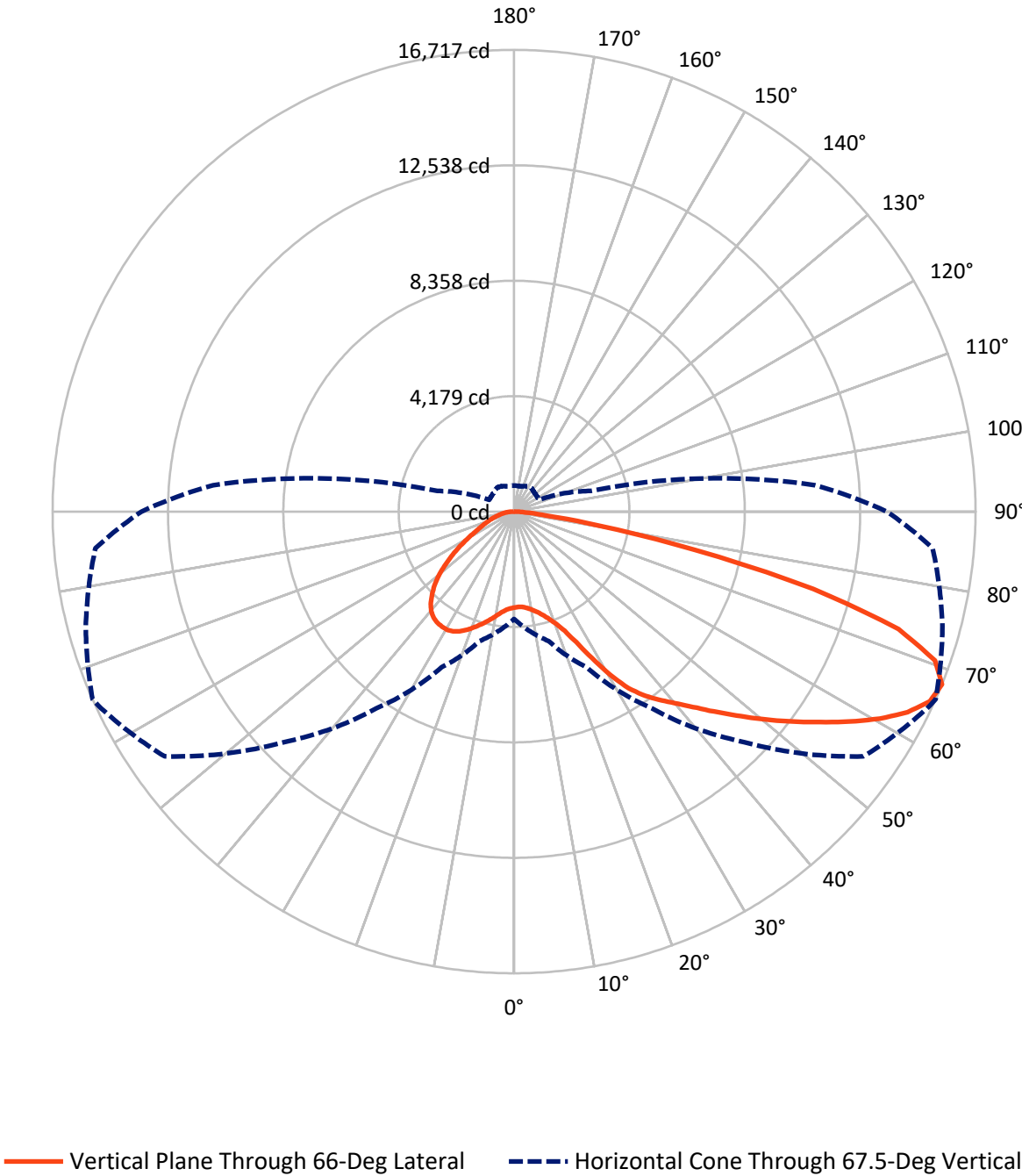


Based on 25 foot mounting height. Maximum calculated value = 7.9 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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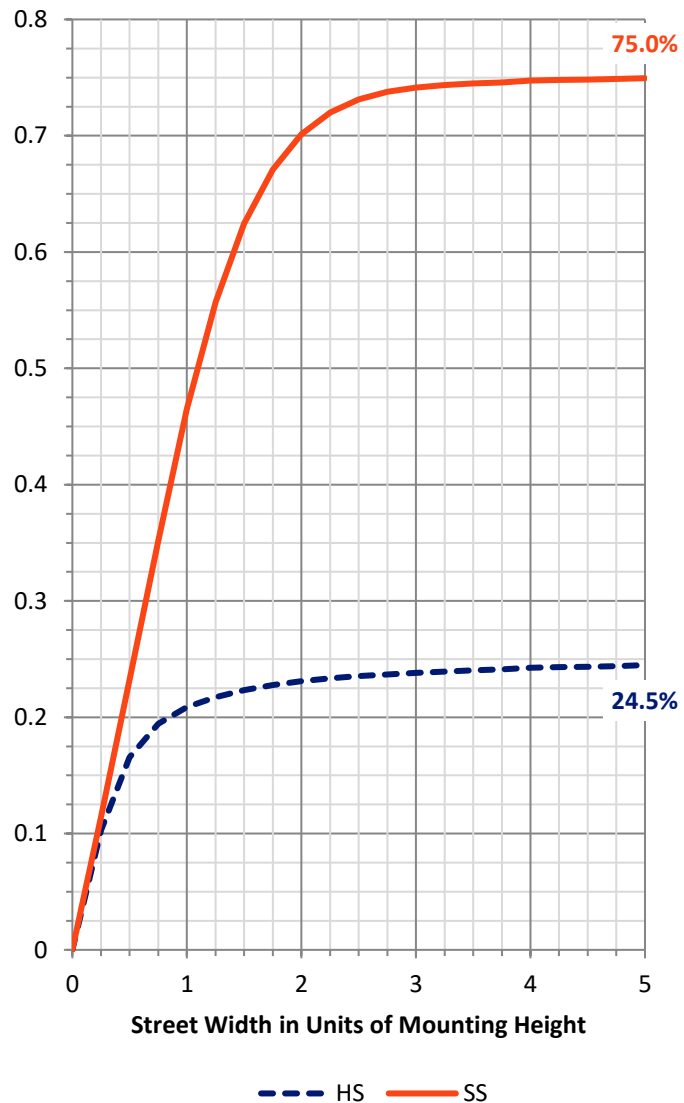
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7786.6	0.0	7786.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	23529.2	0.0	23529.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	31315.8	0.0	31315.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.4	1.1
10°-20°	1137.7	3.6
20°-30°	2192.9	7.0
30°-40°	3845.0	12.3
40°-50°	5716.3	18.3
50°-60°	7246.0	23.1
60°-70°	7090.0	22.6
70°-80°	3382.0	10.8
80°-90°	361.4	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°	31315.8	100.0
0°-180°	31315.8	100.0

Coefficient of Utilization



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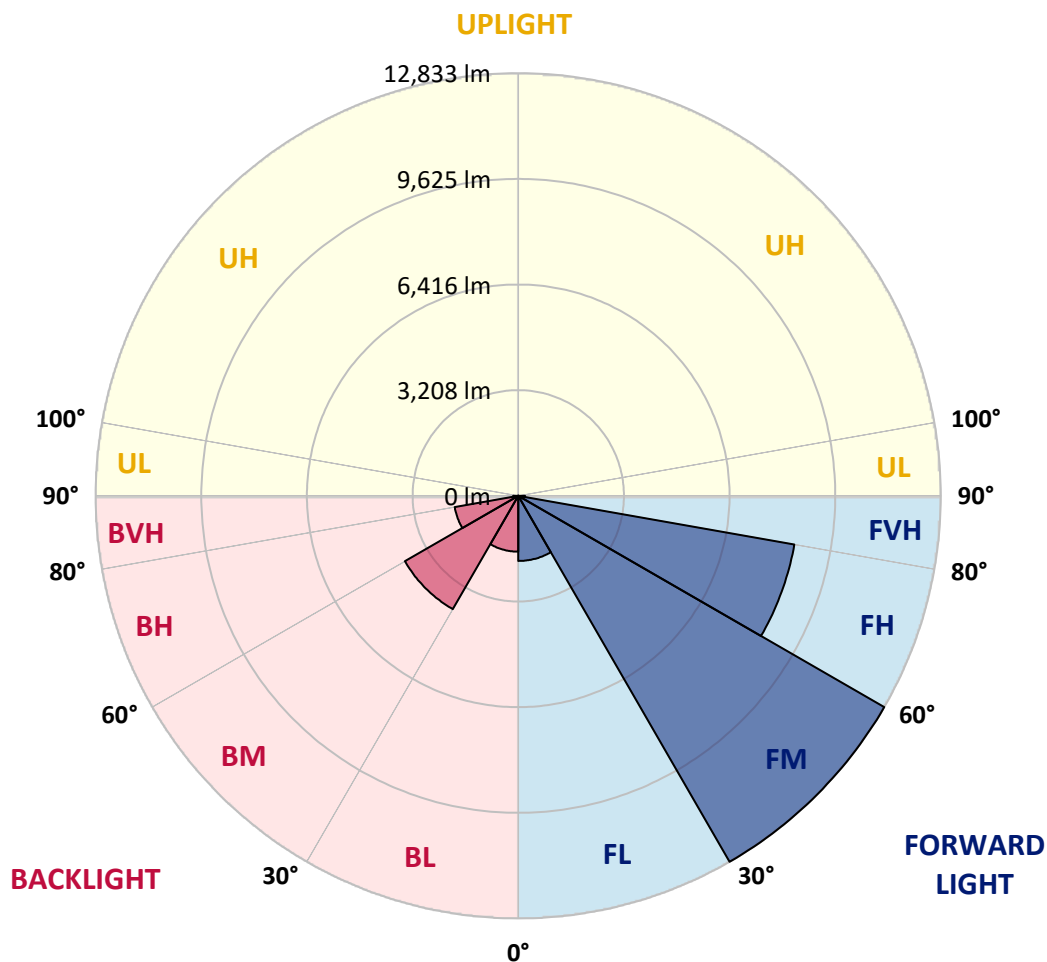
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1978.8	6.3			
FM	(30°-60°)	12832.9	41.0			
FH	(60°-80°)	8512.5	27.2			G4/12000
FVH	(80°-90°)	204.9	0.7			G2/225
BL	(0°-30°)	1696.2	5.4	B3/2500		
BM	(30°-60°)	3974.4	12.7	B3/5000		
BH	(60°-80°)	1959.5	6.3	B3/2500		G3/2500
BVH	(80°-90°)	156.5	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°	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3
2.5°	3437.1	3456.9	3452.0	3443.7	3442.1	3445.3	3450.3	3455.3	3453.6	3461.8	3475.0
5°	3427.3	3447.0	3445.3	3445.3	3452.0	3465.1	3473.3	3481.5	3473.3	3483.3	3501.3
7.5°	3433.9	3448.6	3455.3	3461.8	3478.2	3502.9	3522.7	3540.8	3530.9	3542.4	3565.5
10°	3517.8	3529.3	3535.8	3535.8	3547.4	3575.3	3595.1	3628.0	3619.8	3637.8	3667.4
12.5°	3670.7	3682.3	3682.3	3675.8	3684.0	3702.0	3708.7	3744.8	3730.0	3759.6	3789.2
15°	3858.3	3881.4	3863.3	3851.7	3855.0	3873.2	3871.5	3899.5	3884.6	3909.3	3935.7
17.5°	4065.7	4095.3	4065.7	4064.0	4057.5	4077.1	4078.8	4103.5	4077.1	4095.3	4113.4
20°	4310.8	4351.9	4327.2	4335.5	4320.7	4328.9	4337.2	4373.4	4332.2	4345.4	4340.5
22.5°	4656.4	4705.7	4679.3	4710.6	4700.8	4694.2	4692.6	4756.7	4692.6	4697.5	4649.8
25°	5159.8	5219.1	5173.0	5215.7	5215.7	5237.1	5261.8	5344.1	5237.1	5205.9	5082.5
27.5°	5903.5	5962.7	5872.2	5898.6	5890.4	5943.1	5916.7	6120.7	6005.6	5954.5	5706.1
30°	6798.6	6903.9	6732.8	6726.2	6718.0	6801.9	6839.7	6974.6	6857.9	6806.8	6507.3
32.5°	7766.0	7876.3	7672.2	7613.1	7581.8	7632.8	7601.5	7710.2	7629.5	7550.6	7180.3
35°	8789.5	8898.0	8703.9	8588.8	8463.7	8356.7	8244.9	8272.8	8197.1	8077.0	7693.6
37.5°	9757.0	9956.0	9750.3	9626.9	9396.6	9187.7	8875.1	8745.0	8674.3	8564.1	8177.3
40°	10742.5	10856.0	10699.7	10594.4	10344.3	10016.9	9516.7	9241.9	9146.5	9039.6	8712.1
42.5°	11468.1	11576.7	11492.8	11420.3	11224.6	10844.5	10197.9	9854.0	9715.8	9595.6	9317.7
45°	12044.0	12124.6	12071.9	12098.3	12014.3	11645.8	10903.7	10510.5	10367.4	10220.9	10002.1
47.5°	12276.0	12361.5	12445.4	12601.8	12744.8	12473.4	11662.2	11221.3	11069.9	10920.1	10704.7
50°	12249.7	12336.8	12580.3	12912.7	13357.0	13266.5	12461.8	11978.2	11838.3	11667.2	11468.1
52.5°	12039.0	12137.7	12450.4	13003.3	13710.7	13860.5	13276.3	12759.7	12628.1	12424.0	12225.0
55°	11486.2	11545.4	12014.3	12797.5	13794.7	14275.1	14074.4	13592.2	13460.6	13176.0	12958.8
57.5°	10461.2	10546.7	11229.5	12243.0	13584.0	14556.4	14775.3	14467.6	14340.9	13931.2	13704.1
60°	9123.4	9260.1	10041.6	11311.8	13047.6	14554.8	15412.0	15328.1	15222.8	14674.9	14437.9
62.5°	7609.7	7767.7	8519.6	9995.5	12109.8	14141.8	15810.2	16048.7	15994.4	15361.0	15058.3
65°	5844.2	5952.9	6701.6	8292.6	10650.4	13255.0	15856.2	16540.7	16550.6	15882.6	15382.4
67.5°	3891.2	4203.8	4853.8	6222.7	8695.7	11805.4	15451.5	16621.3	16716.7	16062.0	15219.5
70°	1898.7	2310.0	2946.8	4044.2	6222.7	9582.5	14393.6	15959.9	16172.1	15538.7	14248.7
72.5°	788.1	921.4	1268.5	1995.8	3572.0	6466.2	12267.7	14166.4	14559.7	13768.3	11979.8
75°	531.5	575.8	725.6	1023.4	1627.3	3188.7	8847.1	10563.1	11196.6	10398.6	8499.9
77.5°	409.7	437.7	528.2	715.8	967.5	1206.0	4735.3	6365.9	6693.2	6196.4	4422.7
80°	322.5	343.9	394.9	521.6	686.1	644.9	1614.1	2884.4	3073.6	2578.3	1421.6
82.5°	279.7	287.9	283.0	353.7	455.7	376.8	529.8	1064.6	1174.8	852.3	464.0
85°	202.3	225.4	235.2	218.8	241.9	190.9	217.2	376.8	414.6	370.2	261.6
87.5°	82.3	121.8	149.8	141.4	88.9	54.3	67.4	110.2	126.7	138.2	85.6
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°	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3	3473.3
2.5°	3476.6	3488.2	3496.4	3506.2	3512.8	3522.7	3542.4	3554.0	3555.6	3563.8	3562.2
5°	3507.9	3524.4	3542.4	3568.7	3598.4	3623.1	3660.9	3687.2	3697.1	3705.4	3703.7
7.5°	3575.3	3598.4	3631.3	3677.4	3720.1	3753.0	3799.2	3830.4	3861.7	3873.2	3874.8
10°	3675.8	3708.7	3756.3	3818.8	3865.0	3907.7	3955.5	3981.7	4013.0	4026.2	4032.8
12.5°	3800.8	3835.3	3897.9	3985.0	4027.8	4057.5	4073.9	4067.3	4073.9	4085.4	4088.7
15°	3943.9	3981.7	4052.5	4146.3	4175.8	4149.6	4113.4	4080.4	4075.5	4078.8	4090.4
17.5°	4113.4	4141.3	4223.6	4302.6	4281.2	4172.6	4093.6	4041.0	4014.6	4006.4	4017.9
20°	4350.3	4350.3	4417.8	4467.2	4324.0	4139.7	4016.3	3930.8	3876.4	3853.4	3848.5
22.5°	4638.2	4611.9	4654.7	4620.2	4315.8	4047.5	3876.4	3728.3	3646.1	3613.2	3608.2
25°	5003.5	4972.3	4960.7	4746.9	4256.5	3901.2	3623.1	3443.7	3371.3	3353.2	3356.5
27.5°	5554.7	5475.8	5326.0	4816.0	4148.0	3670.7	3326.9	3160.7	3119.6	3121.2	3126.1
30°	6288.6	6130.6	5763.7	4827.4	3970.2	3345.0	3024.2	2905.7	2886.0	2894.2	2922.2
32.5°	6968.1	6818.3	6211.2	4774.9	3697.1	3025.8	2752.6	2673.7	2644.1	2653.9	2667.2
35°	7501.2	7460.1	6625.8	4700.8	3361.5	2726.4	2509.2	2441.7	2384.1	2370.9	2380.9
37.5°	8004.6	7988.1	6936.8	4597.1	3029.1	2514.1	2313.3	2224.6	2140.6	2094.5	2096.2
40°	8557.5	8541.0	7140.9	4437.5	2734.6	2329.8	2137.3	2020.5	1916.9	1832.9	1841.1
42.5°	9179.4	9082.3	7237.9	4208.9	2484.5	2173.5	1994.1	1836.2	1699.7	1622.3	1627.3
45°	9859.0	9640.1	7236.3	3917.6	2273.9	2030.3	1841.1	1617.3	1490.7	1418.3	1415.0
47.5°	10579.6	10173.2	7147.4	3595.1	2069.9	1872.4	1604.2	1433.1	1349.2	1304.7	1294.9
50°	11323.3	10671.8	6996.0	3224.9	1860.9	1693.1	1456.1	1339.3	1275.1	1234.0	1219.2
52.5°	12022.5	11124.2	6813.4	2805.3	1648.6	1518.6	1390.3	1299.8	1232.4	1186.3	1166.6
55°	12672.5	11514.1	6555.1	2375.8	1475.9	1401.8	1359.0	1283.4	1206.0	1151.8	1130.4
57.5°	13250.0	11767.5	6109.2	1972.8	1352.5	1321.2	1326.1	1255.4	1166.6	1120.5	1090.9
60°	13730.5	11953.4	5449.4	1599.3	1252.1	1242.2	1275.1	1202.7	1099.1	1046.4	1023.4
62.5°	14018.4	11950.2	4639.9	1309.7	1166.6	1169.8	1207.7	1136.9	1031.7	982.3	967.5
65°	13993.7	11657.3	3751.4	1120.5	1084.2	1087.6	1136.9	1064.6	975.7	946.1	944.4
67.5°	13498.4	10943.2	2877.7	997.1	993.8	1008.6	1066.2	1015.2	941.2	937.9	942.8
70°	12157.5	9460.8	2073.2	898.4	900.1	921.4	997.1	983.9	923.0	929.6	927.9
72.5°	9748.7	7213.2	1391.9	794.7	796.3	830.9	931.3	959.2	905.0	992.1	1005.3
75°	6492.6	4498.4	895.0	684.5	686.1	730.5	873.7	911.5	855.6	988.8	997.1
77.5°	3119.6	2022.1	648.3	575.8	575.8	617.0	755.2	816.1	728.9	768.3	704.2
80°	1077.7	760.1	510.0	464.0	454.1	482.1	636.7	707.5	628.5	579.1	542.9
82.5°	424.5	394.9	409.7	360.3	327.4	345.5	495.3	584.1	462.4	417.9	416.3
85°	243.5	256.7	289.6	238.6	189.2	212.3	363.7	419.5	348.8	307.7	314.3
87.5°	65.8	90.5	133.2	123.4	85.6	90.5	172.7	232.0	200.7	154.7	159.6
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)