

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: P965125

Luminaire Tested: **NAV-SB3D-740-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965125
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-SB3D-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA 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: 24177.7 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

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



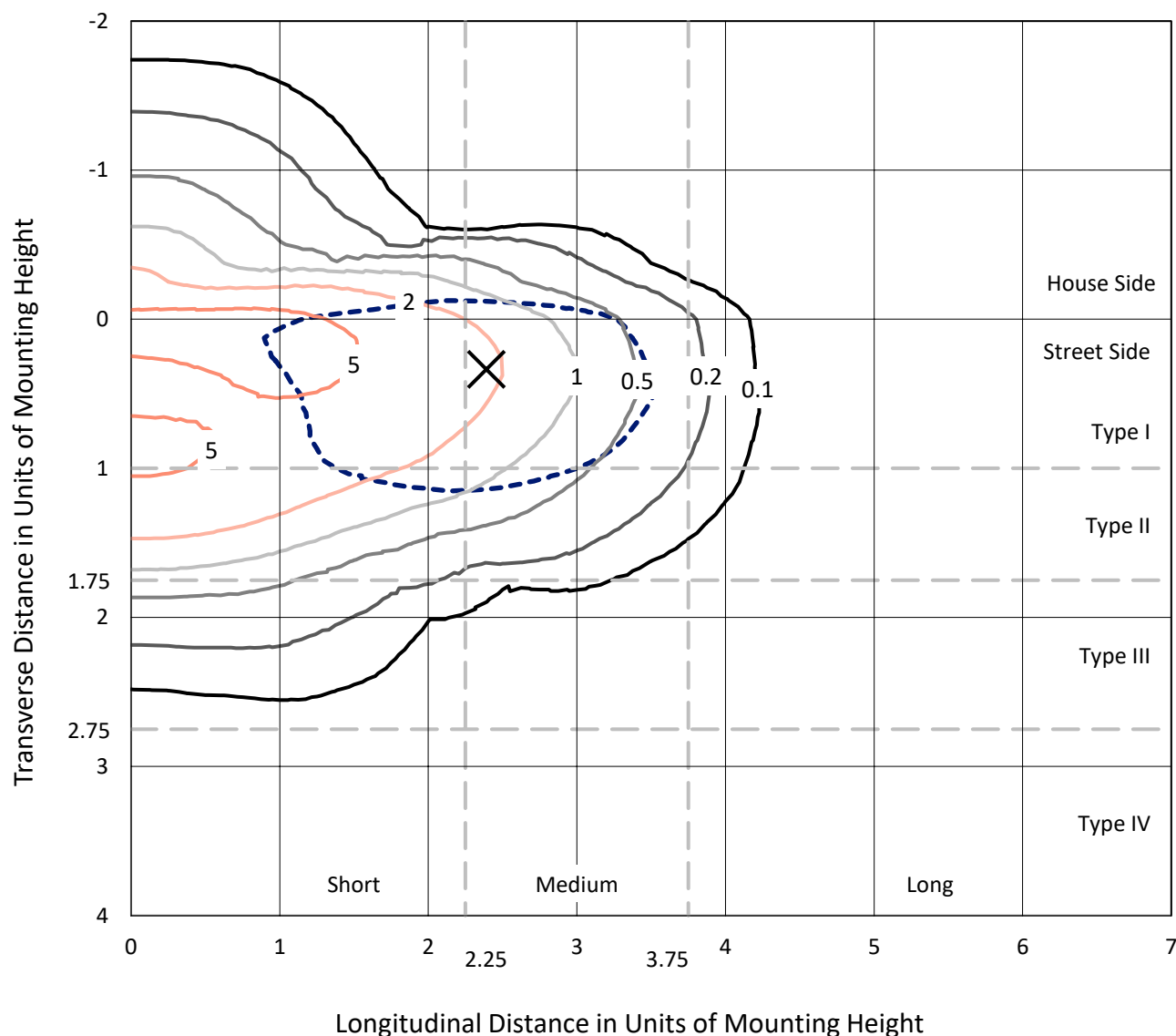
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

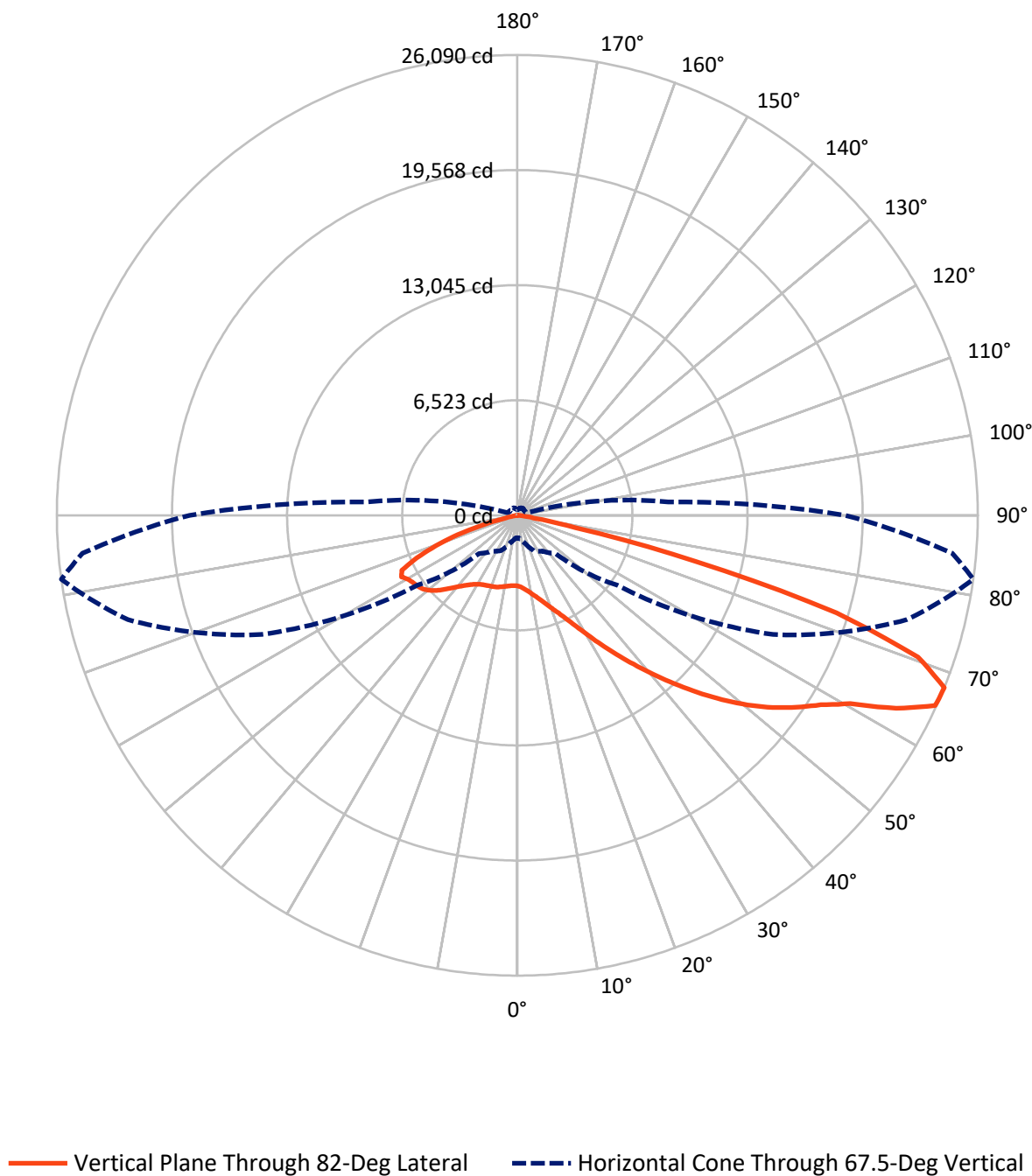


Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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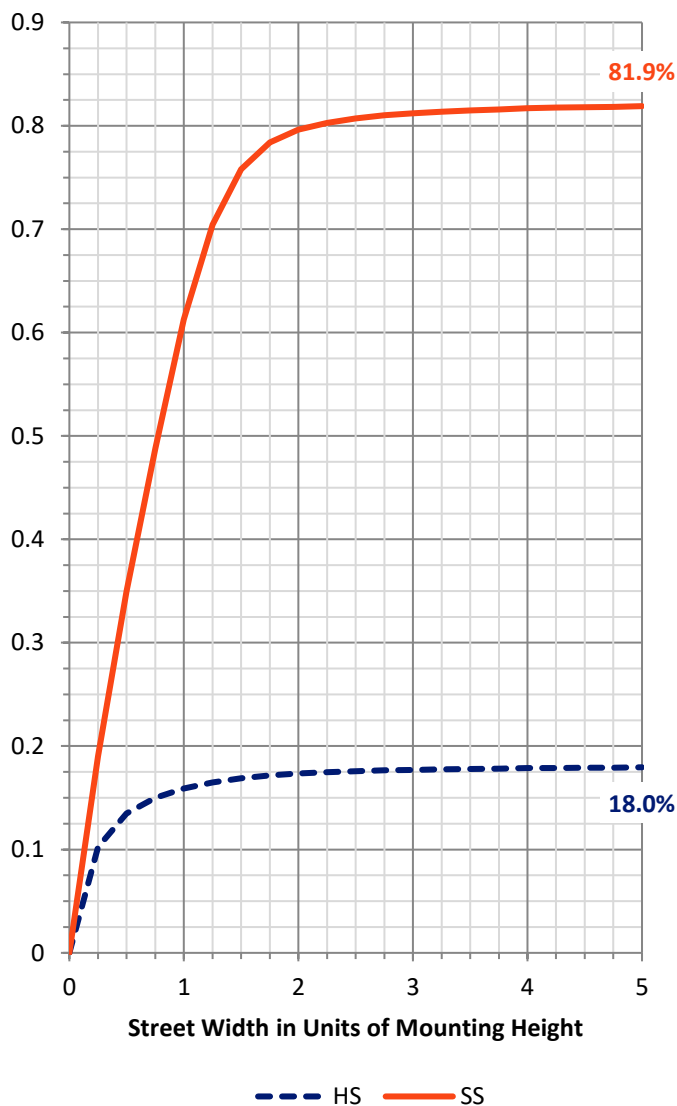
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4379.6	0.0	4379.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	19798.1	0.0	19798.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	24177.7	0.0	24177.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.9	1.5
10°-20°	927.3	3.8
20°-30°	1485.3	6.1
30°-40°	2626.4	10.9
40°-50°	4601.7	19.0
50°-60°	6137.4	25.4
60°-70°	5713.6	23.6
70°-80°	2192.9	9.1
80°-90°	136.2	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°	24177.7	100.0
0°-180°	24177.7	100.0

Coefficient of Utilization



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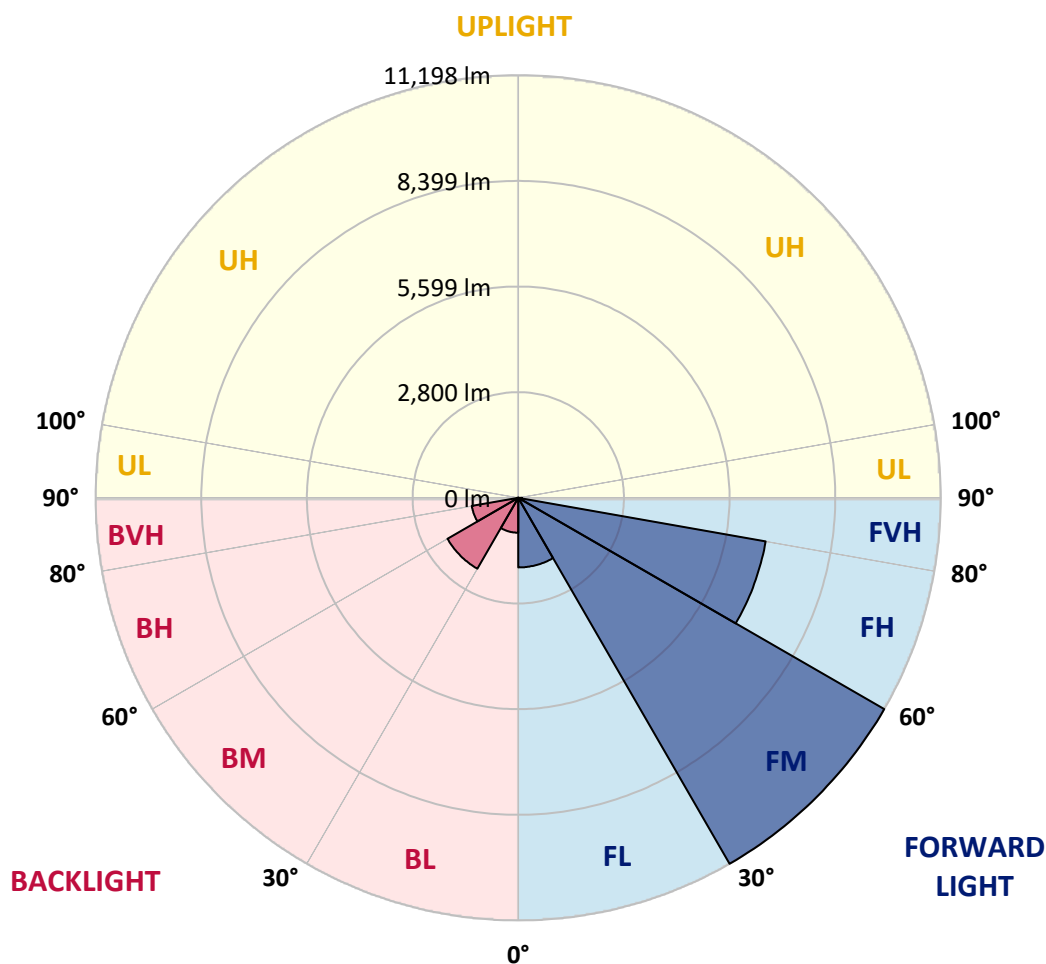
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1844.5	7.6			
FM	(30°-60°)	11198.1	46.3			
FH	(60°-80°)	6656.5	27.5			G3/7500
FVH	(80°-90°)	99.0	0.4			G1/100
BL	(0°-30°)	925.0	3.8	B2/1000		
BM	(30°-60°)	2167.4	9.0	B2/2500		
BH	(60°-80°)	1250.0	5.2	B3/2500		G3/2500
BVH	(80°-90°)	37.2	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4
2.5°	4233.5	4257.8	4243.9	4236.9	4224.7	4207.3	4193.4	4149.9	4104.6	4075.1	4064.6
5°	4318.7	4343.1	4341.4	4348.4	4357.1	4362.3	4358.8	4310.0	4245.7	4195.1	4165.6
7.5°	4245.7	4273.5	4296.1	4330.9	4391.9	4456.3	4487.7	4477.2	4411.0	4341.4	4304.8
10°	4038.5	4068.1	4122.0	4203.8	4332.7	4472.0	4588.6	4642.5	4600.7	4524.1	4473.7
12.5°	3659.0	3688.6	3794.8	3972.4	4188.3	4430.2	4653.0	4797.4	4807.9	4731.3	4672.2
15°	3232.5	3262.2	3375.3	3598.1	3927.1	4315.2	4687.8	4961.1	5053.4	4987.2	4915.8
17.5°	2968.0	2994.0	3079.4	3258.7	3601.5	4085.5	4675.6	5135.1	5345.8	5293.6	5208.2
20°	2887.8	2910.5	2950.6	3075.9	3361.4	3847.0	4595.5	5298.8	5660.9	5631.2	5535.5
22.5°	2973.2	2994.0	3006.2	3062.0	3241.3	3690.3	4494.5	5465.9	6026.4	6029.9	5913.2
25°	3169.9	3190.7	3176.9	3211.6	3289.9	3641.6	4456.3	5662.6	6486.0	6524.2	6392.0
27.5°	3493.6	3495.4	3462.3	3460.6	3472.8	3714.7	4496.3	5873.2	7065.6	7137.0	6973.4
30°	4142.9	4116.8	3989.7	3852.3	3789.5	3934.1	4607.7	6122.1	7749.7	7876.8	7671.4
32.5°	5143.9	5105.5	4872.3	4543.3	4212.5	4287.5	4807.9	6405.9	8494.8	8724.6	8473.9
35°	6230.1	6219.6	5976.0	5486.8	4908.8	4790.5	5133.4	6778.4	9307.7	9673.2	9375.6
37.5°	7239.7	7234.4	7095.3	6519.0	5815.7	5492.1	5655.6	7265.8	10178.0	10707.3	10355.6
40°	8162.3	8178.0	8038.7	7523.4	6815.0	6392.0	6365.9	7868.1	11146.0	11833.5	11415.7
42.5°	8959.5	8976.9	8835.9	8454.7	7802.0	7387.7	7237.9	8606.2	12091.1	13043.3	12549.0
45°	9500.9	9608.9	9588.0	9283.3	8815.1	8385.1	8285.9	9532.3	13168.7	14326.2	13746.6
47.5°	9654.1	9753.3	9910.0	9951.7	9666.3	9243.2	9361.6	10648.1	14258.4	15610.9	14951.2
50°	9276.4	9368.6	9694.1	10127.6	10326.1	10195.5	10407.8	11844.0	15374.2	16892.1	16133.1
52.5°	8531.4	8625.4	9036.2	9722.0	10531.5	10942.3	11457.6	13022.4	16455.1	18105.4	17252.4
55°	7453.8	7553.0	8080.5	8856.8	10139.8	11250.4	12333.1	14199.1	17445.6	19196.8	18262.0
57.5°	5988.2	6061.2	6609.6	7695.8	9154.5	10944.0	12978.9	15483.9	18378.7	20269.1	19262.9
60°	3902.7	3967.2	4604.2	5815.7	7521.8	9920.5	13107.7	16916.4	19618.1	21663.4	20612.0
62.5°	2595.4	2639.0	3016.7	3906.2	5297.1	7955.1	12354.0	18060.1	21435.4	24090.0	22925.5
65°	1780.7	1824.3	2202.0	2821.7	3422.3	5262.2	10186.8	17908.7	23082.1	26017.0	24640.1
67.5°	1270.7	1307.3	1627.6	2212.5	2477.0	3056.8	6905.5	15973.0	22845.4	26090.1	24732.3
70°	910.4	931.3	1195.9	1723.3	1968.8	1836.5	3840.1	12216.5	20002.8	24091.7	22848.9
72.5°	637.1	644.1	830.4	1312.5	1585.8	1340.4	1827.8	8144.9	15128.7	18909.6	17713.7
75°	431.7	440.4	558.7	962.6	1272.4	1023.6	967.8	4367.5	8881.2	10467.0	9382.5
77.5°	264.6	268.0	360.3	657.9	952.2	779.8	623.2	1850.4	3436.2	3373.6	2875.7
80°	149.8	149.8	229.8	409.1	649.3	503.1	437.0	786.8	1087.9	955.7	842.6
82.5°	83.5	85.3	167.1	254.1	430.0	297.7	240.3	363.8	470.0	416.0	362.0
85°	34.8	38.3	102.7	120.1	205.4	148.0	97.5	153.1	174.0	154.9	113.2
87.5°	3.5	5.2	31.4	22.7	24.4	29.6	13.9	29.6	24.4	24.4	17.4
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°	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4
2.5°	4031.5	4005.4	3939.3	3862.7	3761.7	3713.0	3646.8	3601.5	3563.3	3566.8	3531.9
5°	4109.8	4043.7	3895.7	3711.2	3481.5	3317.8	3143.8	3023.6	2926.2	2905.3	2858.3
7.5°	4217.8	4113.3	3854.0	3521.5	3133.3	2839.1	2576.2	2407.4	2287.3	2249.1	2210.7
10°	4357.1	4205.6	3800.0	3283.0	2724.2	2350.0	2068.0	1935.7	1853.9	1826.0	1805.1
12.5°	4518.9	4311.8	3728.6	2992.3	2303.0	1942.7	1763.4	1697.2	1671.1	1662.4	1657.2
15°	4722.6	4444.1	3620.7	2647.7	1946.2	1693.7	1617.1	1608.4	1611.9	1608.4	1606.7
17.5°	4964.6	4588.6	3444.9	2292.5	1705.9	1566.6	1538.8	1545.8	1554.5	1552.8	1549.3
20°	5229.1	4731.3	3220.3	1977.4	1542.3	1476.1	1460.5	1467.4	1474.4	1470.9	1469.1
22.5°	5530.3	4884.5	2971.5	1732.0	1432.6	1392.6	1375.1	1376.9	1376.9	1369.9	1366.4
25°	5890.7	5053.4	2710.3	1558.0	1349.1	1317.7	1296.8	1289.9	1279.4	1258.6	1255.1
27.5°	6320.6	5232.6	2459.7	1436.1	1282.9	1253.4	1229.0	1211.6	1185.4	1150.7	1147.2
30°	6804.6	5450.2	2247.3	1359.6	1230.7	1201.1	1173.2	1147.2	1108.8	1065.3	1061.8
32.5°	7373.7	5683.5	2092.3	1309.0	1183.7	1152.4	1119.3	1087.9	1046.2	1002.7	1004.4
35°	8052.6	5965.5	2001.8	1274.2	1147.2	1105.4	1068.8	1034.0	1002.7	964.3	960.8
37.5°	8789.0	6264.9	1973.9	1256.9	1122.8	1058.4	1016.6	992.2	988.7	966.1	964.3
40°	9594.9	6620.0	1994.9	1246.4	1096.6	1013.1	967.8	962.6	971.3	931.3	933.1
42.5°	10447.9	7041.2	2029.7	1234.2	1060.2	967.8	924.3	924.3	917.4	861.6	861.6
45°	11370.4	7526.9	2064.6	1204.6	1016.6	922.6	889.5	877.3	847.8	793.8	792.0
47.5°	12300.0	8021.3	2090.6	1150.7	964.3	884.3	854.7	826.9	783.3	734.6	732.9
50°	13182.5	8465.2	2062.8	1070.5	905.2	847.8	816.4	778.1	731.1	698.0	692.8
52.5°	13971.2	8849.8	1944.4	976.5	842.6	809.4	781.6	741.6	703.3	668.4	664.9
55°	14657.0	9161.4	1735.5	887.8	786.8	776.3	748.6	698.0	645.9	616.2	612.7
57.5°	15314.9	9398.2	1474.4	814.7	736.4	739.8	698.0	652.8	604.0	572.7	569.2
60°	16190.6	9715.1	1209.8	746.8	682.3	692.8	647.6	614.5	553.6	513.5	508.3
62.5°	17590.1	10207.7	960.8	663.2	619.7	623.2	604.0	564.0	490.9	443.9	440.4
65°	18700.7	10026.7	757.3	572.7	548.4	553.6	553.6	510.0	431.7	377.7	372.5
67.5°	18575.4	8585.3	604.0	483.9	480.4	483.9	496.1	459.5	382.9	339.5	332.5
70°	17111.5	6828.9	483.9	402.1	417.8	409.1	443.9	419.5	344.7	301.1	295.9
72.5°	13962.4	4919.3	369.0	332.5	320.3	334.3	400.4	377.7	287.2	238.5	233.3
75°	8158.8	2625.0	275.0	262.8	231.5	278.5	355.1	322.1	219.4	175.8	170.6
77.5°	2656.4	915.6	201.9	193.2	172.3	224.6	302.9	271.5	179.3	139.3	134.1
80°	712.0	276.8	137.6	127.1	111.4	167.1	240.3	215.9	128.8	90.5	88.8
82.5°	285.5	116.6	80.1	71.3	60.9	114.9	189.7	174.0	95.7	57.4	57.4
85°	92.2	38.3	29.6	22.7	27.9	71.3	113.2	118.4	67.9	29.6	22.7
87.5°	12.2	5.2	5.2	7.0	5.2	12.2	34.8	33.1	19.2	3.5	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)