

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: McGRAW-EDISON

Report Number: P950404

Luminaire Tested: **GALN-SB4D-840-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4D-840-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29772 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

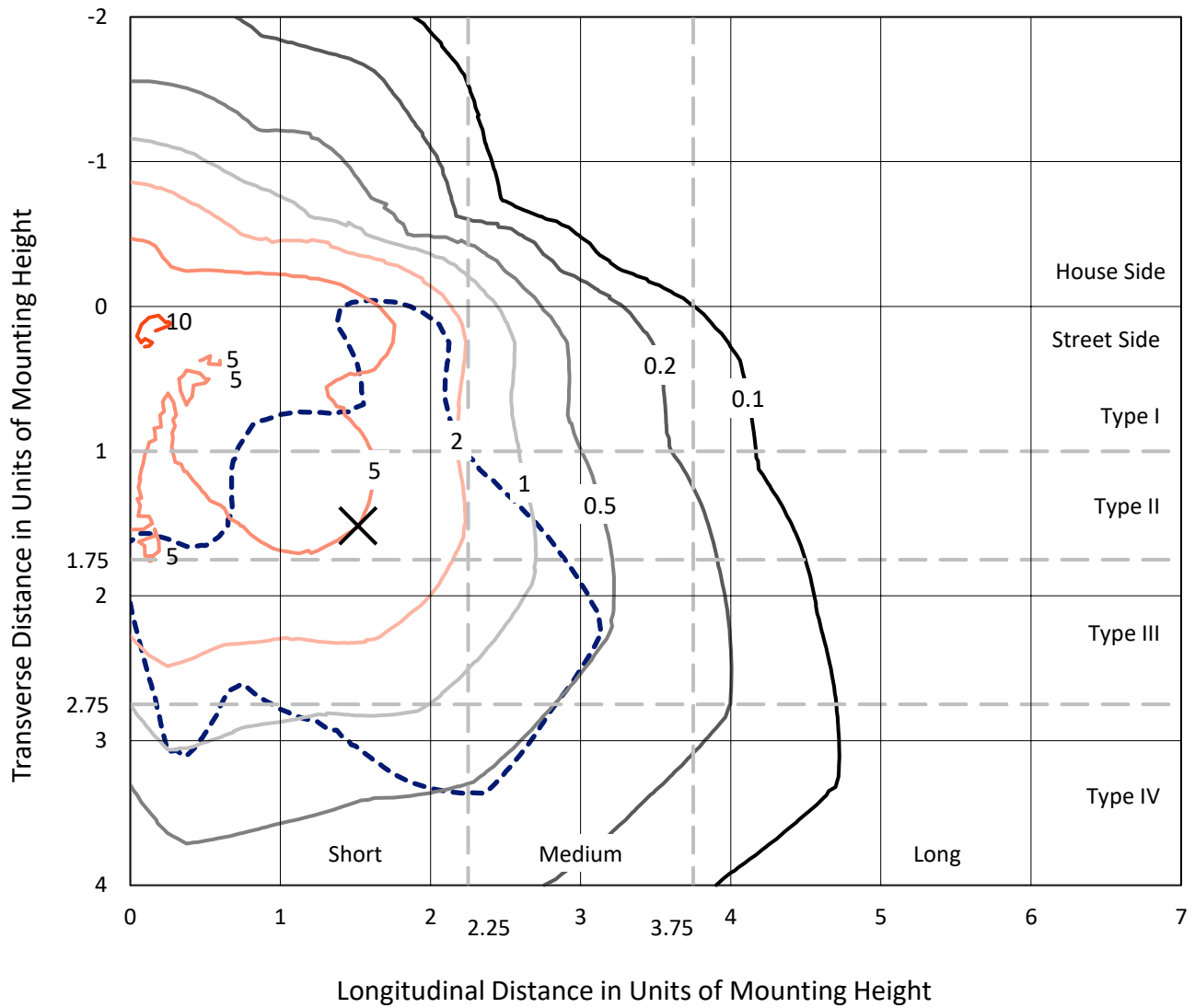
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

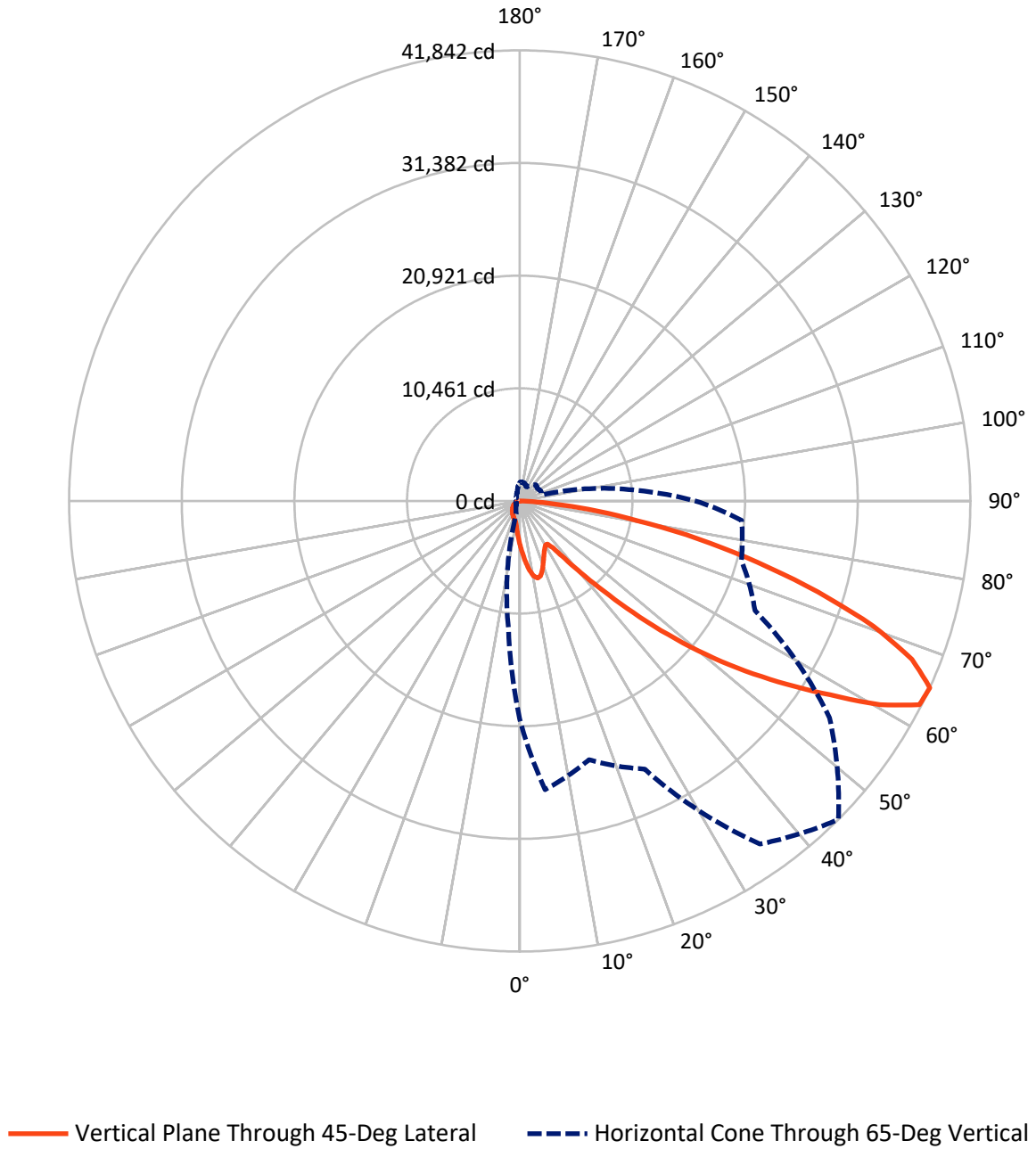
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5917.8	0.0	5917.8
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	23854.2	0.0	23854.2
	% Fixture	80.1	0.0	80.1
Total	Lumens	29772.0	0.0	29772.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.9	1.4
10°-20°	1216.7	4.1
20°-30°	1792.4	6.0
30°-40°	2302.8	7.7
40°-50°	3724.3	12.5
50°-60°	6530.9	21.9
60°-70°	8171.9	27.4
70°-80°	4775.3	16.0
80°-90°	852.0	2.9
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°	29772.0	100.0
0°-180°	29772.0	100.0



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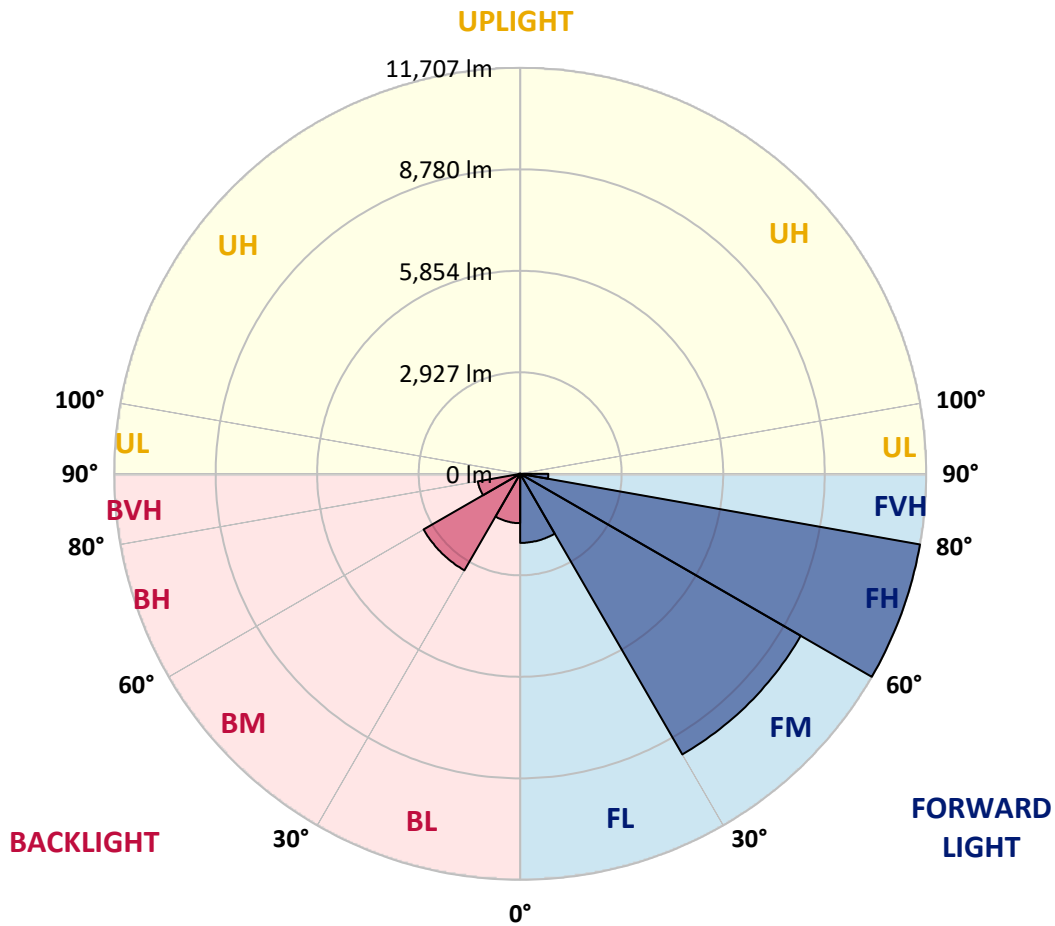
CATALOG NUMBER: GALN-SB4D-840-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1992.1	6.7			
FM (30°-60°)	9342.8	31.4			
FH (60°-80°)	11707.3	39.3			G4/12000
FVH (80°-90°)	812.1	2.7			G5
BL (0°-30°)	1422.9	4.8	B3/2500		
BM (30°-60°)	3215.1	10.8	B3/5000		
BH (60°-80°)	1239.9	4.2	B3/2500		G3/2500
BVH (80°-90°)	39.9	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-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5
2.5°	4618.8	4653.7	4731.6	4772.6	4836.2	4840.3	4840.3	4784.9	4782.9	4670.1
5°	5162.3	5244.4	5428.9	5619.7	5660.7	5671.0	5650.4	5539.7	5457.7	5238.2
7.5°	5701.7	5859.6	6140.6	6395.0	6477.0	6477.0	6427.8	6247.3	6079.1	5761.2
10°	6148.8	6347.8	6729.3	7014.4	7108.7	7088.2	6987.7	6760.0	6528.3	6142.7
12.5°	6444.2	6667.7	7086.1	7315.8	7412.2	7358.9	7244.1	7022.6	6778.5	6372.4
15°	6591.8	6825.7	7188.7	7309.7	7283.0	7227.7	7213.3	7106.6	6922.1	6542.6
17.5°	6655.4	6872.8	7125.1	7049.2	6823.6	6780.5	6924.1	7059.5	7014.4	6690.3
20°	6714.9	6897.4	6973.3	6637.0	6243.2	6204.2	6479.0	6864.6	7061.5	6827.7
22.5°	6796.9	6909.8	6753.9	6202.2	5777.6	5687.4	5990.9	6571.3	7075.9	7002.0
25°	6909.8	6940.5	6511.9	5789.9	5363.3	5273.1	5556.1	6245.2	7051.3	7190.7
27.5°	7045.1	6981.5	6280.1	5445.4	5033.1	4949.0	5232.0	5931.4	6981.5	7379.4
30°	7221.5	7034.9	6050.4	5178.7	4797.2	4735.7	5008.5	5660.7	6895.4	7619.4
32.5°	7399.9	7057.4	5837.1	5022.8	4743.9	4766.5	4990.0	5515.1	6801.0	7849.1
35°	7592.7	7129.2	5732.5	5176.7	5189.0	5385.9	5478.2	5650.4	6786.7	8160.8
37.5°	7855.3	7289.2	5857.6	5941.7	6368.3	6776.4	6700.6	6312.9	6952.8	8626.4
40°	8232.6	7570.2	6403.2	7244.1	8119.8	8782.3	8493.1	7516.8	7461.5	9297.1
42.5°	8782.3	8017.3	7371.2	8835.6	10320.5	11411.7	10636.4	9069.4	8351.6	10254.9
45°	9594.5	8741.3	8542.3	10515.4	13034.0	14752.7	13140.6	10724.6	9598.6	11704.9
47.5°	10720.5	9805.7	9639.6	12285.4	16332.0	18555.2	15917.7	12258.7	11017.9	13682.1
50°	12215.6	11239.4	10679.5	14221.5	19947.8	22431.6	18692.6	13739.5	12644.3	16098.1
52.5°	14188.7	13239.1	11891.6	16065.3	23666.3	26225.9	21479.9	15039.8	14662.5	18901.8
55°	16879.6	16247.9	13548.8	17825.1	27382.6	30042.8	24158.5	16266.3	17328.7	22232.6
57.5°	20218.6	20669.8	15938.2	19865.8	30723.7	33976.5	26849.4	17980.9	20790.8	25957.2
60°	22372.1	26549.9	20513.9	22882.8	34520.0	38425.1	30537.0	21242.0	24429.2	27292.4
62.5°	21851.1	28420.4	25994.1	26734.5	38010.8	41659.5	34150.9	24517.4	25114.2	25325.5
65°	20253.4	26910.9	24876.3	27483.1	38894.8	41842.0	35116.9	24094.9	21303.5	20675.9
67.5°	18054.8	25120.4	22220.3	25497.8	37297.1	39290.6	33318.2	21313.8	16463.2	15515.7
70°	15681.8	23139.2	20477.0	23270.4	34251.4	34844.1	30260.2	18746.0	12109.0	10478.5
72.5°	13429.8	21075.9	19283.3	20987.7	30188.4	28961.9	26279.2	16475.5	8817.2	7557.9
75°	11126.6	18032.2	17583.0	18276.3	24845.6	22813.0	21834.7	13641.1	6920.0	5467.9
77.5°	8585.4	14090.2	15123.9	14635.8	17488.7	16945.2	16924.7	10250.8	5055.7	3648.7
80°	5876.1	9820.1	11815.7	10324.6	11350.1	11073.2	12746.8	6876.9	3667.2	2196.6
82.5°	3453.8	5978.6	8224.4	4998.2	6276.0	6442.1	7590.7	3345.1	2157.6	506.6
85°	1400.8	2360.7	3215.9	1956.6	3027.2	2553.5	2881.6	939.3	600.9	12.3
87.5°	352.8	754.8	529.2	219.5	350.7	322.0	254.3	114.9	24.6	0.0
90°	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°
4122.5	0°	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5
4657.8	2.5°	4577.8	4530.6	4413.7	4296.8	4202.5	4075.3	3991.2	3890.7	3794.3	3708.2
5191.0	5°	5061.8	4905.9	4692.6	4497.8	4298.9	4106.1	3915.3	3714.3	3529.7	3416.9
5642.2	7.5°	5455.6	5180.8	4897.7	4649.6	4409.6	4184.0	3931.7	3687.7	3398.5	3244.7
5986.8	10°	5748.9	5387.9	5016.7	4731.6	4489.6	4270.1	4056.8	3810.7	3462.1	3269.3
6196.0	12.5°	5941.7	5513.0	5078.2	4752.1	4481.4	4311.2	4216.8	4120.4	3773.8	3548.2
6349.8	15°	6075.0	5601.2	5121.3	4704.9	4372.7	4247.6	4341.9	4452.7	4231.2	3970.7
6509.8	17.5°	6220.6	5716.1	5139.8	4577.8	4161.4	4108.1	4352.2	4608.6	4598.3	4339.9
6661.6	20°	6374.4	5816.6	5127.4	4372.7	3905.1	3952.2	4264.0	4561.4	4686.5	4547.0
6835.9	22.5°	6532.4	5913.0	5080.3	4106.1	3665.1	3812.8	4124.5	4385.0	4532.7	4489.6
7049.2	25°	6731.3	6048.3	5010.5	3818.9	3466.2	3671.3	3962.5	4173.7	4276.3	4274.2
7278.9	27.5°	6969.2	6228.8	4973.6	3587.2	3324.6	3511.3	3769.7	3958.4	4030.2	4030.2
7564.0	30°	7246.1	6442.1	4932.6	3435.4	3242.6	3345.1	3546.1	3730.7	3802.5	3802.5
7875.8	32.5°	7553.8	6647.2	4834.2	3343.1	3181.1	3183.1	3310.3	3478.5	3564.6	3576.9
8265.4	35°	7922.9	6866.7	4618.8	3269.3	3109.3	3025.2	3086.7	3226.2	3328.7	3355.4
8821.3	37.5°	8407.0	7135.4	4311.2	3160.6	2998.5	2859.1	2873.4	2980.1	3092.9	3133.9
9588.3	40°	9057.1	7451.2	3991.2	3004.7	2842.7	2676.5	2670.4	2748.3	2859.1	2904.2
10626.1	42.5°	9916.5	7830.6	3685.6	2855.0	2654.0	2483.7	2473.5	2535.0	2631.4	2678.6
11996.2	45°	11015.8	8296.2	3423.1	2738.1	2469.4	2301.2	2297.1	2348.4	2432.5	2481.7
13749.8	47.5°	12543.8	8761.8	3244.7	2676.5	2323.8	2151.5	2159.7	2204.8	2280.7	2315.6
16020.2	50°	14535.3	8903.3	3154.4	2676.5	2245.8	2018.2	2059.2	2096.1	2153.5	2174.0
18741.9	52.5°	16446.8	8435.7	3072.4	2692.9	2256.1	1905.4	1993.6	2020.2	2069.4	2077.6
21264.6	55°	17384.1	7252.3	2959.6	2697.0	2319.7	1809.0	1940.2	1989.5	2007.9	2005.9
22729.0	57.5°	17062.1	5863.8	2768.8	2680.6	2362.7	1747.4	1874.6	1968.9	1981.2	1962.8
22450.0	60°	15932.0	4317.3	2623.2	2559.6	2346.3	1729.0	1774.1	1923.8	1942.3	1917.7
20300.6	62.5°	14036.9	2996.5	2510.4	2293.0	2274.5	1722.8	1616.2	1825.4	1870.5	1835.6
16317.6	65°	11050.7	2116.6	2161.7	2010.0	2118.7	1690.0	1452.1	1706.4	1767.9	1714.6
11838.3	67.5°	7477.9	1528.0	1751.5	1821.3	1866.4	1616.2	1333.1	1571.1	1653.1	1583.4
7596.8	70°	4038.4	1072.7	1156.8	1534.1	1585.4	1489.0	1226.5	1433.6	1528.0	1452.1
5400.2	72.5°	2385.3	771.2	810.1	1232.6	1320.8	1310.6	1107.5	1273.7	1388.5	1298.3
3726.6	75°	1314.7	520.9	578.4	894.2	1072.7	1011.1	951.7	1078.8	1195.7	1107.5
2336.1	77.5°	588.6	311.7	402.0	586.6	843.0	693.2	736.3	840.9	949.6	857.3
1300.3	80°	227.7	174.3	266.6	320.0	613.2	383.5	473.8	619.4	697.3	623.5
283.0	82.5°	28.7	77.9	114.9	125.1	356.9	203.0	274.8	389.7	383.5	332.3
0.0	85°	0.0	14.4	16.4	8.2	153.8	73.8	90.2	127.2	119.0	90.2
0.0	87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	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

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CANDELA DISTRIBUTION (continued):

185°		195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
4122.5	0°	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5
3691.8	2.5°	3591.3	3517.4	3480.5	3449.7	3478.5	3494.9	3494.9	3564.6	3605.6	3622.0
3345.1	5°	3164.7	3027.2	2935.0	2879.6	2898.0	2918.5	2941.1	3029.3	3088.8	3127.7
3105.2	7.5°	2828.3	2619.1	2489.9	2422.2	2432.5	2446.8	2465.3	2551.4	2610.9	2662.2
3060.1	10°	2662.2	2366.8	2196.6	2114.6	2100.2	2092.0	2085.8	2137.1	2182.2	2223.3
3244.7	12.5°	2670.4	2258.1	2051.0	1950.5	1907.4	1858.2	1819.2	1827.4	1856.1	1907.4
3574.9	15°	2775.0	2223.3	1975.1	1850.0	1778.2	1720.8	1673.6	1663.3	1673.6	1681.8
3952.2	17.5°	2916.5	2219.2	1909.5	1753.6	1679.8	1632.6	1589.5	1575.2	1577.2	1587.5
4202.5	20°	3029.3	2206.9	1835.6	1661.3	1595.7	1554.6	1511.6	1497.2	1501.3	1503.4
4227.1	22.5°	3088.8	2188.4	1753.6	1569.0	1513.6	1472.6	1433.6	1431.6	1431.6	1443.9
4093.8	25°	3088.8	2149.4	1679.8	1480.8	1431.6	1394.7	1347.5	1355.7	1359.8	1376.2
3886.6	27.5°	3014.9	2075.6	1620.3	1404.9	1353.6	1316.7	1273.7	1283.9	1290.1	1308.5
3681.5	30°	2920.6	1987.4	1552.6	1333.1	1273.7	1247.0	1210.1	1214.2	1222.4	1242.9
3490.8	32.5°	2820.1	1882.8	1497.2	1261.4	1201.9	1181.4	1140.3	1146.5	1154.7	1177.3
3302.1	35°	2709.3	1759.7	1431.6	1195.7	1136.2	1119.8	1072.7	1076.8	1089.1	1113.7
3099.0	37.5°	2592.4	1659.2	1366.0	1132.1	1070.6	1054.2	1005.0	1009.1	1023.4	1052.2
2885.7	40°	2477.6	1560.8	1296.2	1064.5	1002.9	988.6	935.2	939.3	955.8	986.5
2670.4	42.5°	2352.5	1484.9	1206.0	994.7	929.1	914.7	865.5	871.7	890.1	920.9
2471.4	45°	2202.8	1435.7	1105.5	929.1	855.3	840.9	795.8	808.1	828.6	859.4
2301.2	47.5°	2048.9	1415.2	1021.4	859.4	779.4	767.1	730.1	750.7	773.2	797.8
2155.6	50°	1901.3	1388.5	935.2	793.7	713.7	701.4	676.8	703.5	726.0	748.6
2051.0	52.5°	1733.1	1331.1	857.3	736.3	658.4	654.3	642.0	666.6	687.1	707.6
1960.7	55°	1558.7	1238.8	789.6	685.0	611.2	615.3	609.1	629.7	646.1	664.5
1878.7	57.5°	1407.0	1121.9	736.3	629.7	570.2	582.5	574.3	584.5	594.8	617.3
1780.3	60°	1253.1	982.4	676.8	564.0	529.2	543.5	520.9	518.9	523.0	529.2
1634.6	62.5°	1046.0	836.8	603.0	506.6	484.0	490.2	447.1	414.3	414.3	420.5
1431.6	65°	840.9	701.4	520.9	441.0	422.5	418.4	356.9	311.7	307.6	326.1
1195.7	67.5°	691.2	582.5	438.9	367.1	354.8	358.9	313.8	268.7	264.6	285.1
974.2	70°	572.2	469.7	350.7	283.0	295.3	313.8	268.7	225.6	219.5	237.9
791.7	72.5°	455.3	367.1	268.7	209.2	244.1	266.6	219.5	178.4	174.3	190.7
611.2	75°	334.3	262.5	182.5	151.8	188.7	209.2	160.0	127.2	121.0	135.4
408.1	77.5°	207.1	147.7	114.9	90.2	129.2	139.5	84.1	73.8	71.8	82.0
248.2	80°	96.4	63.6	55.4	30.8	47.2	55.4	34.9	39.0	41.0	49.2
125.1	82.5°	26.7	10.3	2.1	0.0	0.0	16.4	8.2	16.4	20.5	30.8
10.3	85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	10.3	18.5
0.0	87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
0.0	90°	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):

285°		295°	305°	315°	325°	335°	345°	355°	360°
4122.5	0°	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5	4122.5
3736.9	2.5°	3823.0	3905.1	4036.3	4171.7	4305.0	4440.4	4571.6	4618.8
3306.2	5°	3468.2	3656.9	3917.4	4196.3	4483.4	4774.7	5041.3	5162.3
2861.1	7.5°	3072.4	3343.1	3734.8	4171.7	4629.1	5086.4	5506.9	5701.7
2420.2	10°	2649.9	2992.4	3439.5	4030.2	4686.5	5318.2	5896.6	6148.8
2032.5	12.5°	2247.9	2606.8	3101.1	3808.7	4641.4	5451.5	6146.8	6444.2
1759.7	15°	1911.5	2229.4	2762.7	3546.1	4495.7	5459.7	6265.7	6591.8
1608.0	17.5°	1659.2	1866.4	2418.1	3254.9	4305.0	5383.8	6306.8	6655.4
1525.9	20°	1534.1	1591.6	1971.0	2881.6	4126.6	5312.0	6347.8	6714.9
1460.3	22.5°	1460.3	1474.7	1612.1	2399.6	3913.3	5289.5	6419.6	6796.9
1400.8	25°	1400.8	1404.9	1441.8	1901.3	3587.2	5275.1	6530.3	6909.8
1339.3	27.5°	1341.3	1341.3	1361.9	1532.1	3144.2	5213.6	6673.9	7045.1
1277.8	30°	1281.9	1281.9	1296.2	1355.7	2625.3	5092.6	6846.2	7221.5
1216.2	32.5°	1220.3	1220.3	1232.6	1275.7	2096.1	4940.8	7004.1	7399.9
1152.7	35°	1158.8	1154.7	1171.1	1216.2	1667.4	4748.0	7162.0	7592.7
1089.1	37.5°	1093.2	1091.1	1107.5	1158.8	1439.8	4524.5	7281.0	7855.3
1025.5	40°	1023.4	1023.4	1041.9	1097.3	1374.2	4243.5	7469.7	8232.6
959.9	42.5°	959.9	955.8	976.3	1043.9	1324.9	3974.8	7808.1	8782.3
900.4	45°	898.3	890.1	908.6	992.7	1238.8	3880.5	8439.8	9594.5
843.0	47.5°	840.9	820.4	836.8	931.1	1160.9	4233.2	9473.5	10720.5
791.7	50°	793.7	754.8	769.1	869.6	1101.4	4998.2	10814.8	12215.6
744.5	52.5°	744.5	693.2	701.4	793.7	1048.1	5726.3	12269.0	14188.7
697.3	55°	693.2	635.8	639.9	717.8	972.2	5835.0	13688.2	16879.6
644.0	57.5°	635.8	582.5	582.5	648.1	916.8	5057.7	14779.4	20218.6
578.4	60°	572.2	537.4	527.1	592.7	966.0	3568.7	14906.5	22372.1
494.3	62.5°	502.5	484.0	469.7	539.4	1002.9	2114.6	13883.1	21851.1
389.7	65°	422.5	418.4	408.1	592.7	845.0	1249.0	11918.2	20253.4
332.3	67.5°	354.8	348.7	348.7	621.4	642.0	785.5	9311.4	18054.8
283.0	70°	305.6	283.0	283.0	469.7	389.7	543.5	6501.6	15681.8
233.8	72.5°	256.4	231.8	215.4	375.3	291.2	397.9	4063.0	13429.8
178.4	75°	205.1	186.6	166.1	248.2	217.4	301.5	2360.7	11126.6
112.8	77.5°	147.7	139.5	116.9	182.5	157.9	217.4	1404.9	8585.4
69.7	80°	75.9	77.9	73.8	104.6	106.7	147.7	799.9	5876.1
45.1	82.5°	45.1	34.9	39.0	51.3	61.5	84.1	301.5	3453.8
32.8	85°	28.7	18.5	18.5	24.6	30.8	32.8	92.3	1400.8
16.4	87.5°	14.4	6.2	8.2	12.3	10.3	8.2	4.1	352.8
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)