

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: P651431

Luminaire Tested: **GALN-SA5D-840-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-840-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23569 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

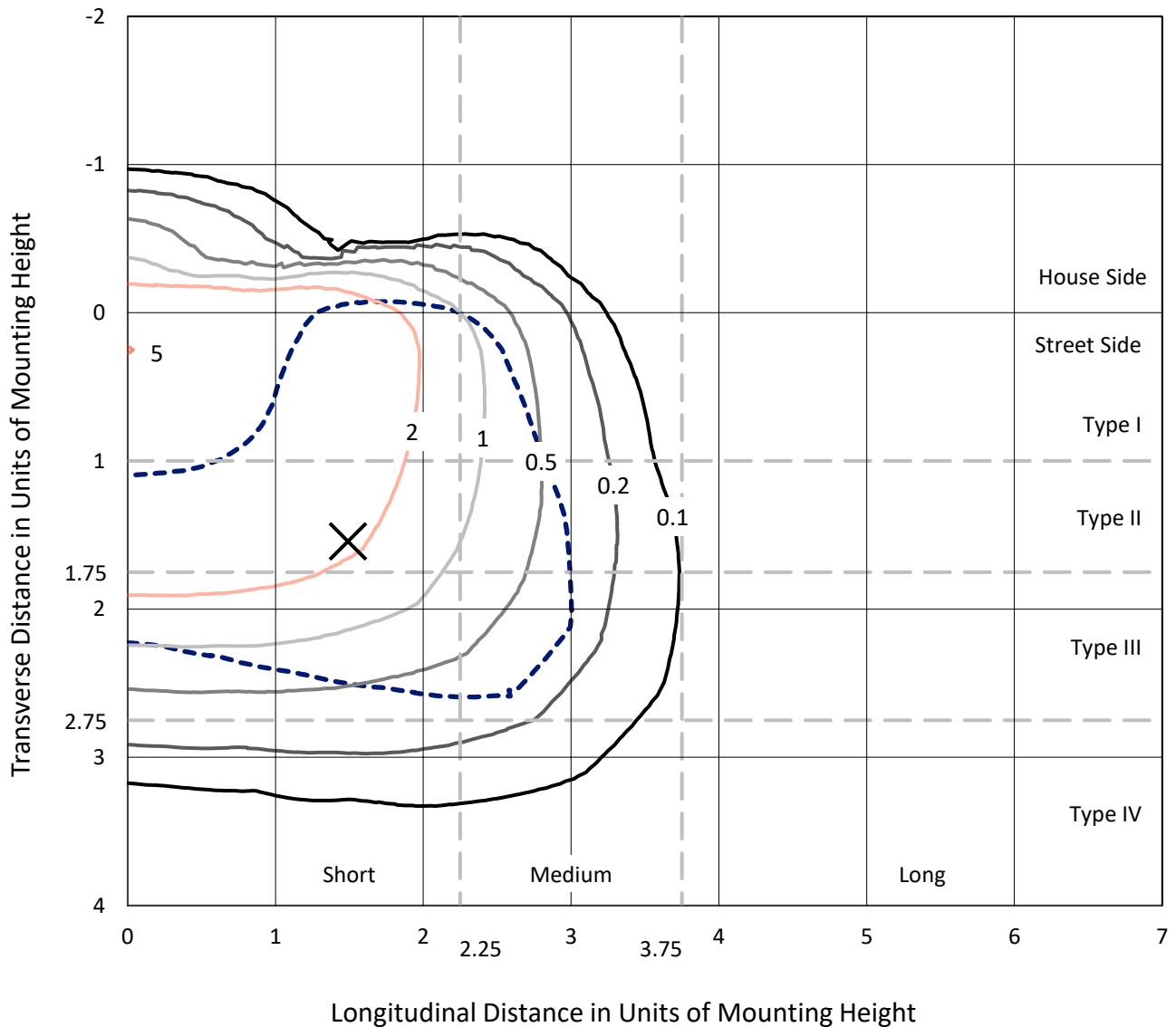
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

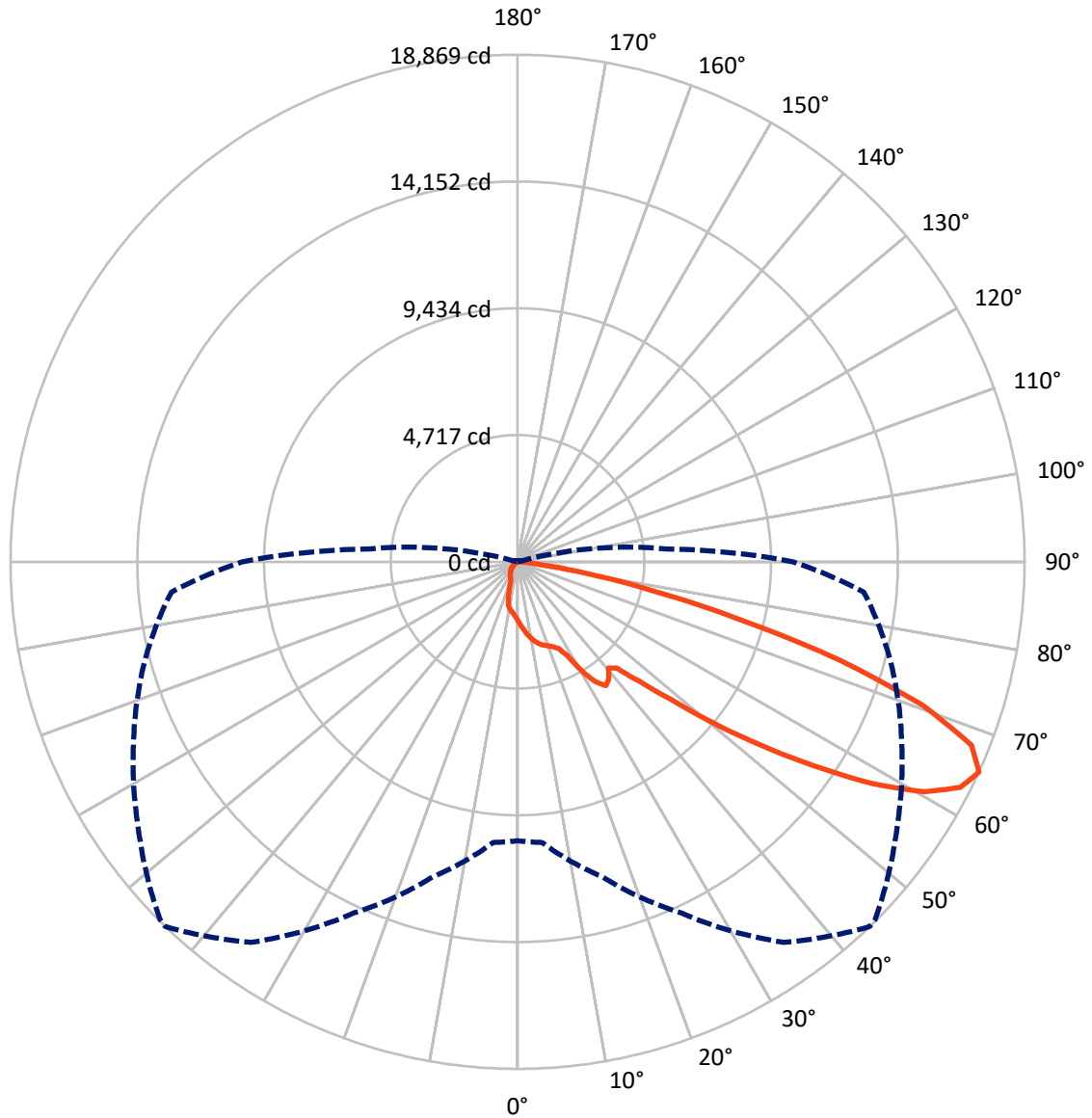
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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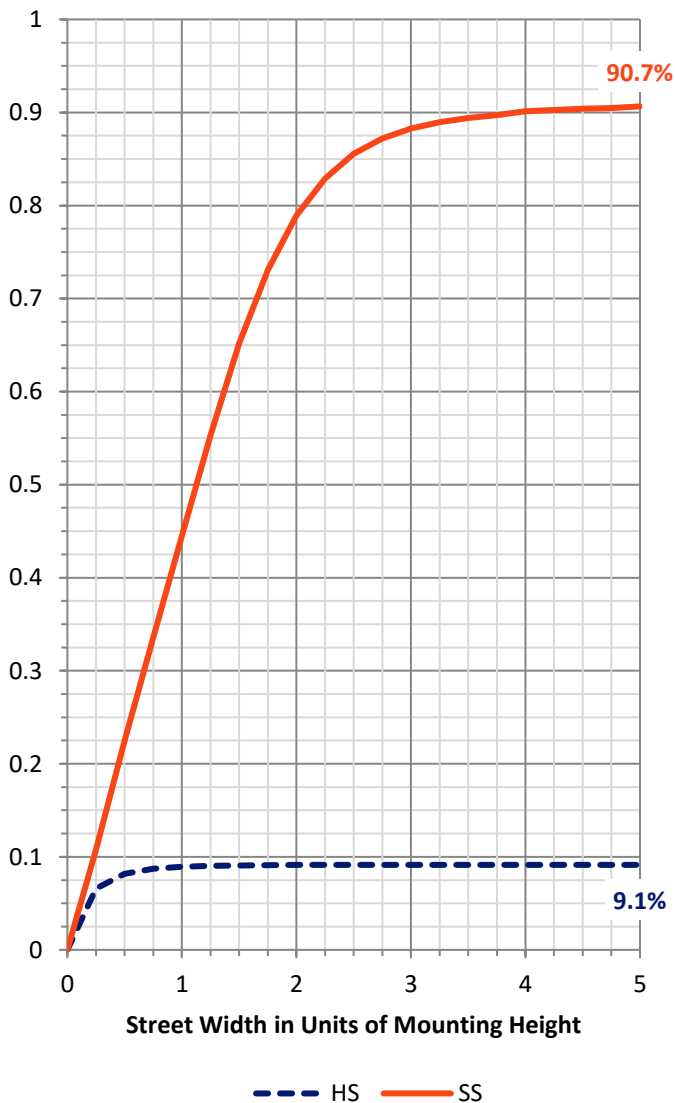
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2171.5	0.0	2171.5
	% Fixture	9.2	0.0	9.2
Street Side	Lumens	21397.5	0.0	21397.5
	% Fixture	90.8	0.0	90.8
Total	Lumens	23569.0	0.0	23569.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.2	0.9
10°-20°	656.6	2.8
20°-30°	1113.4	4.7
30°-40°	1851.2	7.9
40°-50°	3232.3	13.7
50°-60°	6314.8	26.8
60°-70°	7326.6	31.1
70°-80°	2668.0	11.3
80°-90°	188.0	0.8
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°	23569.0	100.0
0°-180°	23569.0	100.0

Coefficient of Utilization

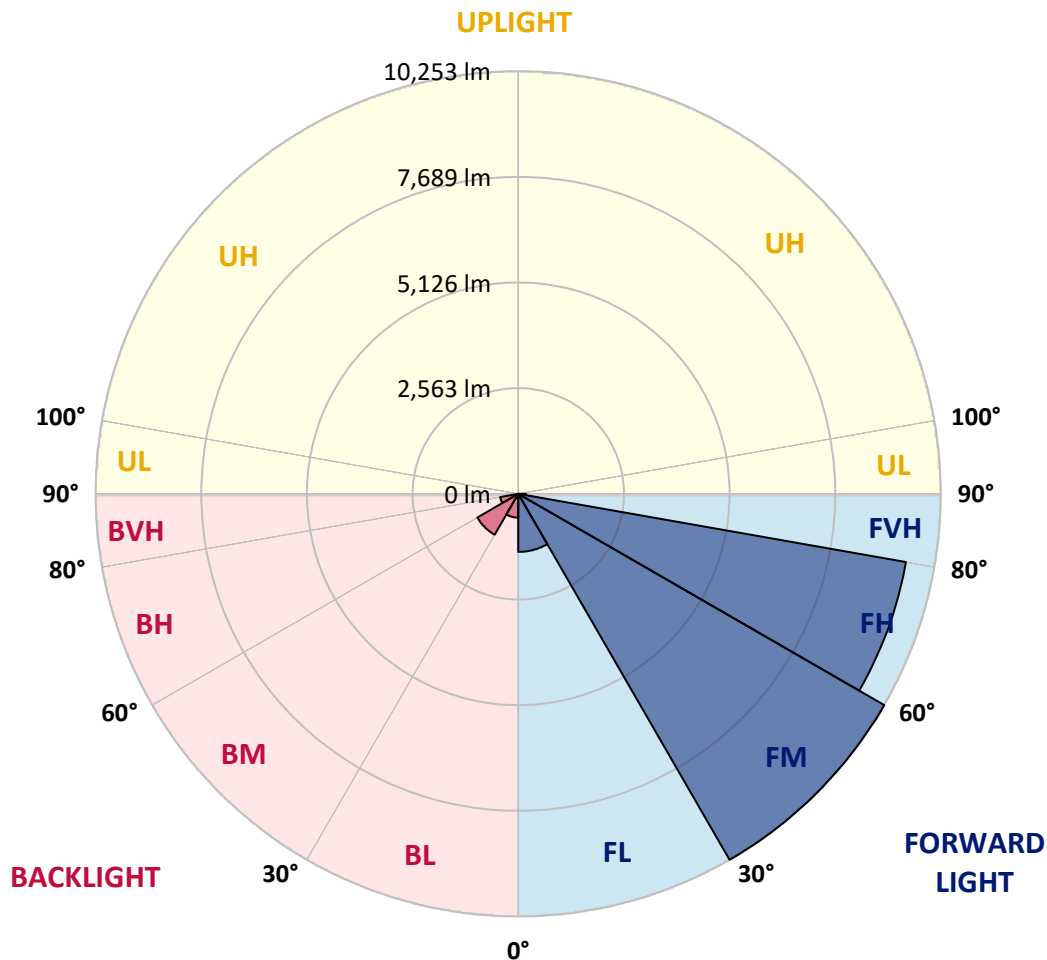


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1409.6	6.0			
FM (30°-60°)	10252.6	43.5			
FH (60°-80°)	9549.9	40.5			G4/12000
FVH (80°-90°)	185.4	0.8			G2/225
BL (0°-30°)	578.6	2.5	B2/1000		
BM (30°-60°)	1145.7	4.9	B2/2500		
BH (60°-80°)	444.7	1.9	B1/500		G1/500
BVH (80°-90°)	2.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6
2.5°	2469.1	2458.3	2452.9	2424.1	2402.5	2375.5	2375.5	2341.3	2301.6	2258.4	2218.8
5°	2744.7	2726.7	2703.2	2678.0	2627.6	2555.5	2555.5	2483.6	2400.7	2326.9	2245.8
7.5°	3009.4	2993.2	2953.6	2905.0	2822.1	2746.5	2741.1	2636.6	2537.5	2425.9	2310.6
10°	3241.7	3229.1	3194.9	3101.3	3014.8	2915.7	2914.0	2796.9	2681.6	2544.8	2402.5
12.5°	3403.8	3405.6	3360.6	3270.6	3158.9	3065.3	3058.0	2942.7	2822.1	2674.5	2499.7
15°	3519.1	3519.1	3472.2	3371.4	3270.6	3187.7	3180.5	3079.7	2955.4	2795.1	2606.0
17.5°	3551.5	3562.3	3511.8	3421.9	3340.8	3268.7	3266.9	3182.3	3083.3	2928.4	2714.1
20°	3538.9	3549.7	3510.1	3439.9	3384.0	3342.6	3337.2	3302.9	3211.1	3065.3	2829.3
22.5°	3511.8	3522.7	3493.9	3452.5	3425.4	3438.0	3429.0	3457.9	3409.2	3232.7	2966.2
25°	3517.3	3528.1	3506.5	3483.1	3506.5	3583.9	3607.3	3731.6	3688.4	3445.2	3113.9
27.5°	3686.6	3708.2	3677.6	3688.4	3771.2	3951.4	3996.3	4210.6	4019.7	3715.4	3344.4
30°	4063.0	4048.6	3991.0	4043.2	4331.3	4713.1	4700.5	4666.3	4367.3	4027.0	3618.2
32.5°	4405.2	4392.5	4388.9	4614.1	5136.3	5321.8	5312.8	4981.5	4678.9	4383.5	3888.3
35°	4543.8	4495.2	4484.4	5030.1	5903.6	5658.7	5602.8	5111.1	5057.1	4772.6	4163.8
37.5°	4961.6	4927.4	4760.0	5098.6	5597.4	5516.4	5473.1	5334.5	5460.5	5116.6	4475.4
40°	5822.5	5727.0	5575.7	5244.4	5163.4	5197.5	5240.8	5620.8	5937.8	5586.6	4891.4
42.5°	6892.2	6870.6	6589.7	5972.0	5365.1	5411.9	5467.8	6218.7	6624.0	6294.4	5570.4
45°	8176.4	8207.0	7801.8	7072.4	6276.4	6316.0	6397.0	7101.2	7553.3	7394.7	6638.3
47.5°	9343.4	9320.0	9183.1	8424.9	7690.1	7601.9	7733.3	8234.0	8839.2	8864.3	7963.8
50°	10517.6	10641.9	10438.4	10141.2	9595.6	9410.0	9361.4	9606.3	10528.4	10407.8	9555.9
52.5°	12205.1	12269.9	11888.1	11812.5	11936.8	11335.3	11286.6	11346.1	12171.0	11756.7	10748.1
55°	13265.9	13228.1	13085.8	13676.5	14168.2	13417.1	13355.9	13116.4	13534.2	12709.4	11895.4
57.5°	13600.9	13654.9	13986.3	15054.2	16217.7	15580.1	15468.5	14787.7	14517.6	13597.3	12950.7
60°	13451.4	13550.4	14265.5	15853.9	17467.6	17372.1	17276.7	16133.1	15223.5	14339.3	13690.9
62.5°	12387.0	12525.7	13669.3	15711.6	17890.8	18486.9	18368.0	16972.3	15693.6	14699.5	13820.6
65°	10380.7	10483.4	12125.9	14420.3	17289.3	18868.7	18825.4	17235.2	15767.4	14369.9	12932.7
67.5°	7400.1	7749.6	9271.4	12152.9	15509.9	18216.7	18290.6	16920.1	15074.1	12945.3	10710.3
70°	4651.9	4889.6	5981.0	8700.5	12433.8	15981.8	16224.9	15477.5	13082.2	10090.8	7169.6
72.5°	2218.8	2395.3	3173.3	5507.4	8776.1	12574.3	12767.1	12705.8	10116.1	6357.4	3699.1
75°	988.8	1055.4	1514.6	2811.3	5665.8	8451.9	8950.8	9033.6	6321.4	3110.3	1439.0
77.5°	504.3	506.0	709.6	1361.5	2829.3	5042.7	5141.8	5431.7	3427.2	1370.5	500.6
80°	268.4	286.4	376.4	642.9	1467.8	2483.6	2470.9	2715.8	1520.0	671.8	167.5
82.5°	120.7	133.3	212.5	336.8	716.8	941.9	1015.8	1111.2	651.9	428.7	73.8
85°	36.0	43.2	104.5	169.3	259.4	272.0	304.4	392.6	369.2	304.4	37.8
87.5°	5.4	5.4	43.2	46.8	37.8	48.6	50.5	55.8	118.8	111.7	19.8
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°	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6	2193.6
2.5°	2197.2	2184.6	2139.5	2101.7	2069.3	2049.5	2026.1	2011.7	2004.4	1999.1	2000.9
5°	2206.2	2175.6	2098.1	2036.9	1990.1	1939.6	1905.5	1885.6	1876.6	1862.2	1862.2
7.5°	2256.6	2208.0	2099.9	2006.3	1925.2	1856.8	1791.9	1768.5	1752.3	1748.8	1745.2
10°	2328.6	2267.4	2119.7	1990.1	1874.8	1781.2	1689.3	1608.2	1545.3	1507.4	1502.0
12.5°	2418.7	2330.4	2150.4	1979.3	1831.6	1665.9	1422.7	1258.9	1149.0	1114.8	1120.2
15°	2501.6	2406.1	2181.0	1970.3	1752.3	1381.3	1105.8	918.5	862.7	857.2	859.1
17.5°	2600.6	2487.1	2217.0	1957.7	1534.4	1055.4	821.2	770.8	781.6	799.6	797.9
20°	2703.2	2573.5	2260.2	1882.0	1224.7	794.2	725.8	731.2	747.4	763.6	767.2
22.5°	2813.1	2672.6	2310.6	1700.1	934.7	691.6	687.9	695.2	711.4	729.4	733.0
25°	2964.4	2796.9	2348.5	1462.4	707.8	639.3	646.6	659.2	673.6	693.4	696.9
27.5°	3158.9	2964.4	2368.3	1152.6	612.3	592.5	594.3	612.3	630.3	648.3	648.3
30°	3411.0	3164.3	2328.6	871.7	565.5	547.5	540.3	551.1	574.5	592.5	594.3
32.5°	3636.1	3353.4	2224.2	666.3	531.3	506.0	488.0	489.9	498.9	509.6	511.5
35°	3861.3	3537.1	2045.9	560.1	495.3	466.4	439.4	425.0	417.8	412.4	417.8
37.5°	4149.4	3765.8	1808.2	509.6	464.7	428.7	390.8	360.2	335.0	318.7	322.4
40°	4520.5	4082.8	1527.3	477.3	435.8	392.6	342.2	302.6	259.4	244.9	237.8
42.5°	5132.7	4563.6	1231.9	450.3	407.0	354.8	291.7	237.8	198.1	183.7	187.3
45°	6099.9	5170.6	949.1	421.4	378.2	313.4	244.9	187.3	154.9	147.7	151.3
47.5°	7382.1	5955.8	731.2	389.0	342.2	268.4	192.7	147.7	127.8	126.1	124.3
50°	8588.8	6687.0	610.6	353.0	299.0	223.3	158.4	124.3	111.7	109.8	109.8
52.5°	9680.2	7211.1	497.0	311.6	252.1	183.7	133.3	109.8	99.1	93.7	93.7
55°	10650.9	7553.3	403.4	261.1	198.1	145.9	115.3	99.1	86.5	79.2	77.5
57.5°	11383.9	7594.7	302.6	208.9	147.7	113.5	99.1	86.5	72.1	63.1	59.5
60°	11697.2	7236.3	223.3	158.4	109.8	90.1	79.2	70.2	54.0	45.0	43.2
62.5°	11382.1	6539.3	165.7	120.7	84.6	66.6	55.8	52.2	37.8	27.0	25.2
65°	10252.9	5532.5	131.4	91.8	63.1	48.6	36.0	34.2	23.4	12.6	10.8
67.5°	8214.2	4333.1	104.5	68.5	45.0	32.4	23.4	21.6	12.6	3.6	3.6
70°	5341.7	2769.9	84.6	50.5	28.8	21.6	14.4	10.8	7.2	1.8	0.0
72.5°	2642.0	1294.9	68.5	39.6	19.8	10.8	5.4	3.6	5.4	0.0	0.0
75°	1024.8	461.0	50.5	27.0	10.8	5.4	3.6	0.0	1.8	0.0	0.0
77.5°	340.4	153.1	30.6	14.4	7.2	3.6	0.0	0.0	0.0	0.0	0.0
80°	126.1	59.5	16.2	9.0	3.6	1.8	0.0	0.0	0.0	0.0	0.0
82.5°	50.5	23.4	10.8	7.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	25.2	14.4	7.2	5.4	3.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	18.0	10.8	7.2	5.4	3.6	1.8	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)