

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: P299845

Luminaire Tested: **GLNA-AF-06-LED-E1-5WQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299845
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-06-LED-E1-5WQ-7027
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32467.3 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G4

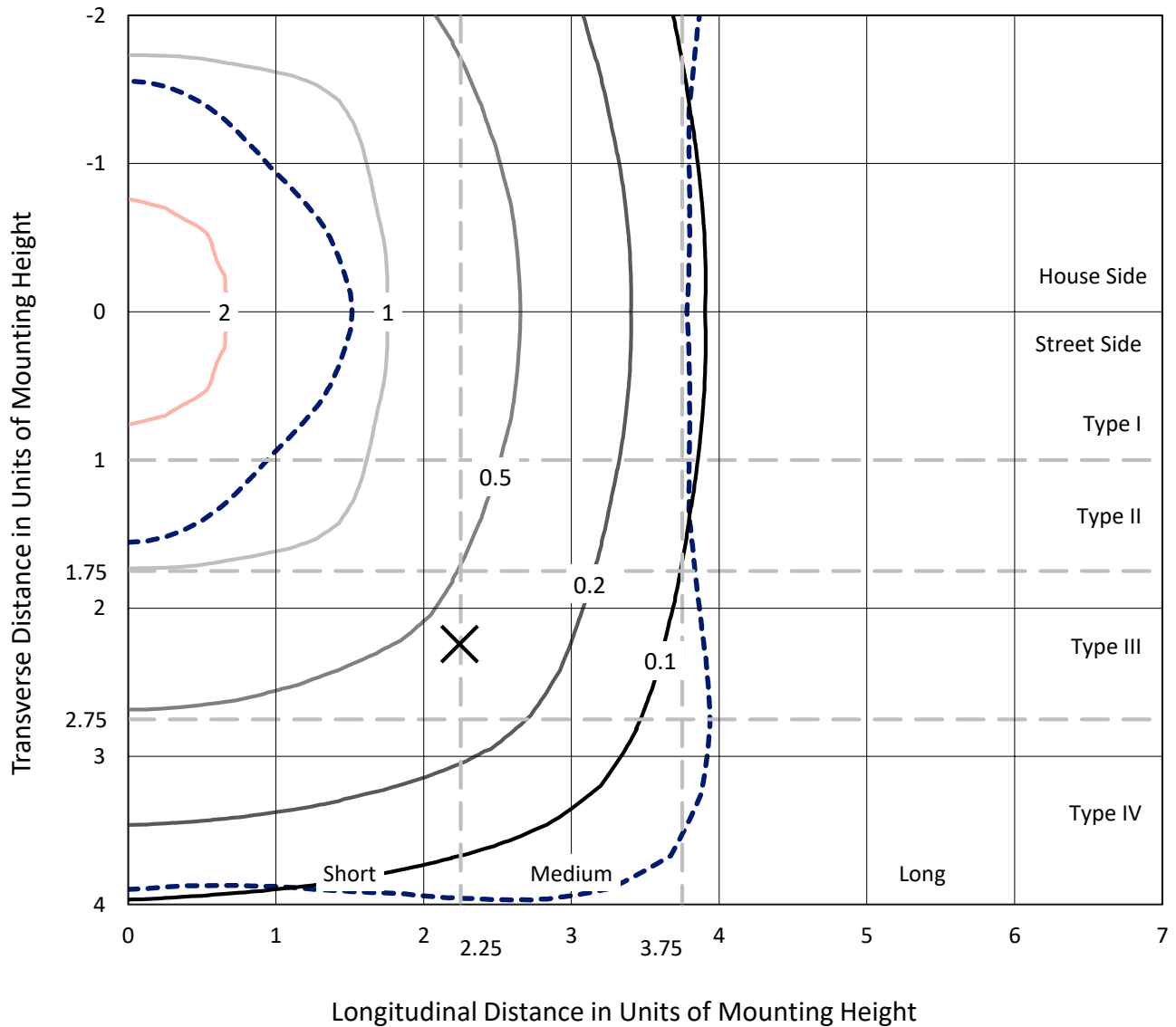
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

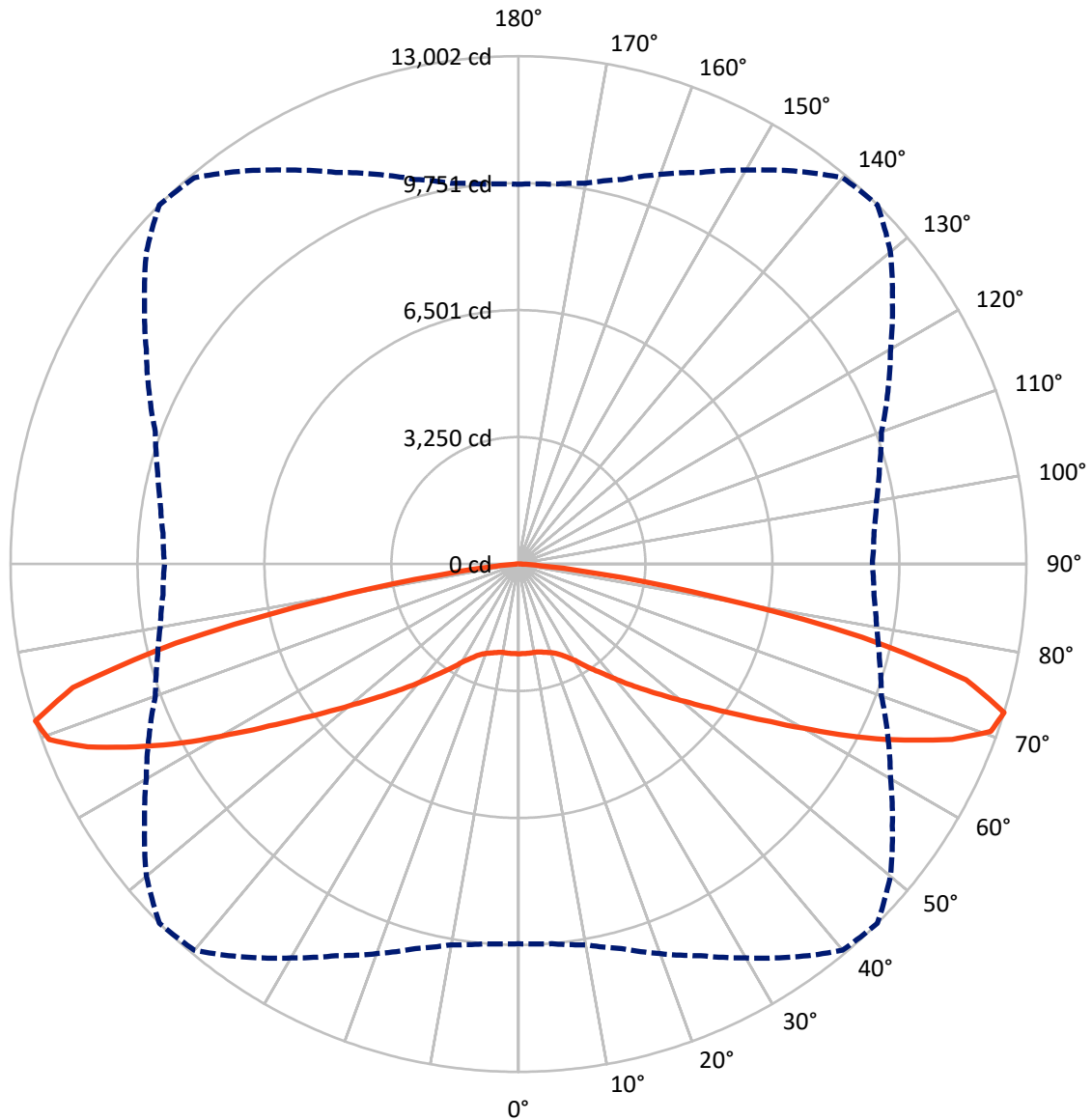
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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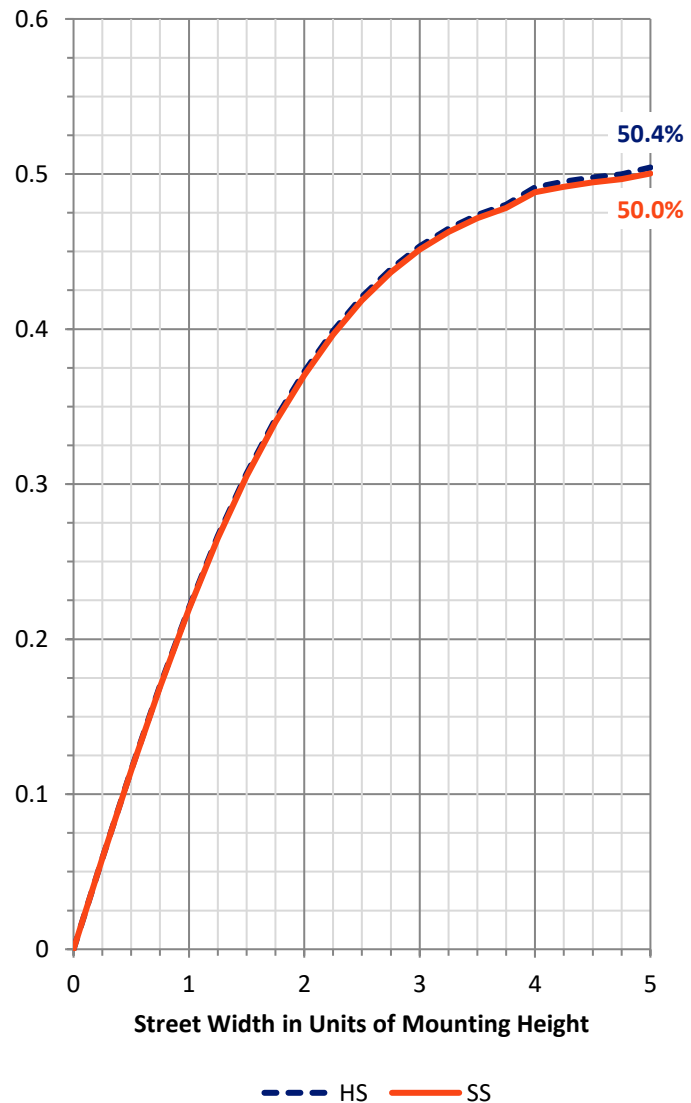
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16233.7	0.0	16233.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	16233.7	0.0	16233.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	32467.3	0.0	32467.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.5	0.7
10°-20°	666.8	2.1
20°-30°	1218.5	3.8
30°-40°	2100.9	6.5
40°-50°	3591.5	11.1
50°-60°	5821.3	17.9
60°-70°	9657.3	29.7
70°-80°	8505.8	26.2
80°-90°	685.8	2.1
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°	32467.3	100.0
0°-180°	32467.3	100.0



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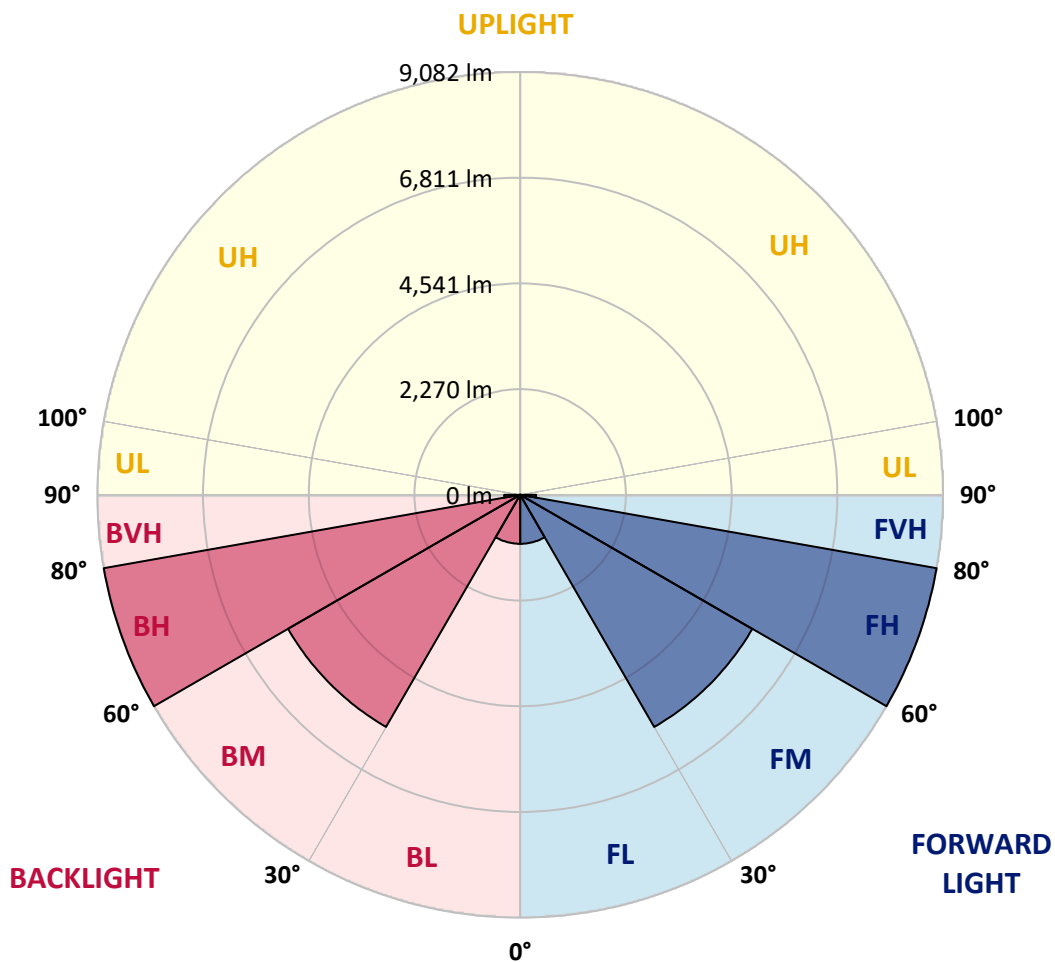
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1052.4	3.2			
FM	(30°-60°)	5756.8	17.7			
FH	(60°-80°)	9081.5	28.0			G4/12000
FVH	(80°-90°)	342.9	1.1			G3/500
BL	(0°-30°)	1052.4	3.2	B3/2500		
BM	(30°-60°)	5756.8	17.7	B4/8500		
BH	(60°-80°)	9081.5	28.0	B5		G4/12000
BVH	(80°-90°)	342.9	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2
2.5°	2299.2	2300.7	2302.2	2300.7	2300.7	2299.2	2297.7	2299.2	2297.7	2294.7	2296.2
5°	2306.6	2309.6	2309.6	2306.6	2308.1	2306.6	2303.7	2305.1	2302.2	2297.7	2297.7
7.5°	2315.6	2317.1	2317.1	2314.1	2315.6	2312.6	2309.6	2308.1	2305.1	2299.2	2294.7
10°	2329.0	2330.5	2329.0	2326.0	2326.0	2321.5	2314.1	2311.1	2305.1	2296.2	2291.7
12.5°	2343.9	2345.4	2343.9	2340.9	2339.4	2332.0	2326.0	2321.5	2317.1	2309.6	2302.2
15°	2364.7	2367.7	2364.7	2358.8	2354.3	2348.3	2345.4	2346.8	2348.3	2342.4	2334.9
17.5°	2403.4	2404.9	2400.5	2387.1	2381.1	2375.1	2375.1	2378.1	2382.6	2379.6	2372.2
20°	2474.9	2470.4	2460.0	2443.6	2436.2	2425.8	2424.3	2425.8	2425.8	2424.3	2418.3
22.5°	2564.3	2561.3	2547.9	2527.0	2516.6	2510.6	2501.7	2494.3	2492.8	2488.3	2482.4
25°	2671.5	2670.0	2653.6	2635.7	2628.3	2620.8	2613.4	2603.0	2594.0	2583.6	2577.7
27.5°	2808.5	2802.5	2778.7	2769.8	2759.3	2754.9	2744.4	2732.5	2725.1	2711.7	2704.2
30°	2958.9	2958.9	2939.5	2936.5	2936.5	2926.1	2914.2	2893.3	2879.9	2866.5	2862.1
32.5°	3109.3	3110.8	3091.4	3097.4	3101.8	3109.3	3112.2	3104.8	3095.9	3094.4	3085.4
35°	3326.7	3320.7	3301.4	3305.8	3304.3	3302.9	3302.9	3319.2	3322.2	3325.2	3307.3
37.5°	3596.2	3596.2	3576.9	3576.9	3567.9	3559.0	3547.1	3557.5	3573.9	3578.3	3566.4
40°	3904.5	3914.9	3891.1	3889.6	3892.5	3864.3	3850.9	3867.2	3877.7	3895.5	3882.1
42.5°	4267.8	4260.4	4236.5	4233.6	4217.2	4208.2	4196.3	4209.7	4226.1	4238.0	4242.5
45°	4616.3	4610.3	4583.5	4583.5	4567.1	4559.7	4565.6	4588.0	4595.4	4611.8	4628.2
47.5°	4960.2	4952.8	4934.9	4942.4	4943.9	4957.3	4976.6	4997.5	5018.3	5040.7	5048.1
50°	5311.7	5313.2	5293.8	5311.7	5334.0	5371.2	5423.4	5457.6	5500.8	5529.1	5538.0
52.5°	5631.8	5637.8	5658.6	5700.3	5745.0	5818.0	5907.3	5990.7	6062.2	6109.8	6106.9
55°	6016.0	6025.0	6075.6	6147.1	6220.0	6330.2	6462.8	6610.2	6729.3	6797.8	6754.6
57.5°	6507.4	6526.8	6583.4	6680.2	6788.9	6931.8	7113.5	7335.4	7520.0	7612.4	7542.4
60°	7182.0	7193.9	7262.4	7369.6	7500.7	7677.9	7920.6	8218.4	8479.0	8601.1	8520.7
62.5°	8071.0	8093.3	8148.4	8257.1	8391.2	8592.2	8888.5	9260.8	9585.4	9755.2	9573.5
65°	9132.7	9204.2	9250.4	9360.6	9485.7	9698.6	10008.3	10407.4	10755.9	10867.6	10657.6
67.5°	10184.1	10246.6	10327.0	10453.6	10580.2	10819.9	11107.3	11494.5	11877.2	11978.4	11652.3
70°	10644.2	10679.9	10805.0	10977.8	11220.5	11503.4	11835.5	12270.3	12743.8	12827.2	12413.3
72.5°	9722.4	9758.2	9898.1	10191.5	10614.4	11064.1	11643.4	12282.2	12907.6	13001.5	12431.1
75°	7353.2	7295.2	7502.2	7890.8	8461.1	9088.1	9898.1	10813.9	11717.8	11835.5	11155.0
77.5°	3800.2	3792.8	3949.1	4431.6	5112.1	5825.4	6717.4	7752.3	8636.9	8994.3	8440.3
80°	1070.7	1082.6	1157.0	1396.8	1794.4	2309.6	3006.5	3975.9	4699.6	5068.9	4759.2
82.5°	419.9	452.7	481.0	525.7	577.8	653.7	872.6	1298.5	1742.3	2081.8	1705.0
85°	150.4	160.8	227.8	269.5	274.0	288.9	329.1	384.2	463.1	552.5	454.2
87.5°	56.6	62.5	73.0	120.6	119.1	108.7	132.5	138.5	104.2	95.3	117.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2
2.5°	2293.2	2294.7	2294.7	2296.2	2297.7	2297.7	2300.7	2300.7
5°	2294.7	2294.7	2291.7	2293.2	2291.7	2291.7	2293.2	2293.2
7.5°	2291.7	2290.3	2287.3	2285.8	2282.8	2282.8	2282.8	2282.8
10°	2287.3	2285.8	2282.8	2281.3	2279.8	2279.8	2279.8	2279.8
12.5°	2299.2	2294.7	2291.7	2290.3	2290.3	2290.3	2290.3	2290.3
15°	2330.5	2320.0	2312.6	2312.6	2314.1	2317.1	2317.1	2320.0
17.5°	2369.2	2357.3	2349.8	2343.9	2346.8	2351.3	2354.3	2357.3
20°	2415.3	2409.4	2399.0	2393.0	2393.0	2399.0	2401.9	2403.4
22.5°	2479.4	2474.9	2470.4	2463.0	2463.0	2466.0	2471.9	2471.9
25°	2574.7	2571.7	2568.7	2562.8	2561.3	2561.3	2564.3	2567.2
27.5°	2693.8	2695.3	2692.3	2690.8	2686.4	2684.9	2689.3	2687.9
30°	2853.1	2860.6	2868.0	2862.1	2854.6	2850.2	2845.7	2839.7
32.5°	3069.1	3060.1	3054.2	3043.8	3030.3	3018.4	3009.5	2999.1
35°	3273.1	3258.2	3252.2	3261.2	3259.7	3252.2	3241.8	3232.9
37.5°	3523.2	3520.3	3523.2	3539.6	3536.6	3544.1	3523.2	3521.8
40°	3838.9	3841.9	3862.8	3882.1	3892.5	3903.0	3891.1	3879.1
42.5°	4205.3	4203.8	4211.2	4238.0	4255.9	4267.8	4242.5	4239.5
45°	4592.4	4582.0	4588.0	4610.3	4628.2	4641.6	4613.3	4613.3
47.5°	5018.3	5000.4	4981.1	5006.4	5016.8	5025.8	5003.4	4996.0
50°	5493.3	5456.1	5414.4	5424.8	5424.8	5421.9	5393.6	5392.1
52.5°	6038.4	5969.9	5893.9	5865.6	5849.2	5831.4	5782.2	5758.4
55°	6665.3	6562.5	6443.4	6370.4	6331.7	6282.6	6200.7	6178.3
57.5°	7397.9	7237.1	7031.6	6942.3	6855.9	6775.5	6684.6	6659.3
60°	8266.1	8029.3	7756.8	7591.5	7497.7	7420.3	7326.4	7322.0
62.5°	9234.0	8860.2	8552.0	8403.1	8334.6	8266.1	8176.7	8188.6
65°	10218.3	9828.2	9539.3	9418.6	9354.6	9298.0	9208.7	9222.1
67.5°	11189.2	10830.3	10513.1	10389.6	10318.1	10246.6	10166.2	10179.6
70°	11886.1	11440.9	11083.5	10809.5	10638.2	10444.6	10319.6	10288.3
72.5°	11686.6	11000.1	10432.7	9889.2	9570.5	9311.4	9135.7	9059.8
75°	10114.1	9175.9	8446.3	7779.1	7403.9	7098.6	6876.7	6738.2
77.5°	7511.1	6456.8	5594.6	4826.2	4218.7	3810.6	3523.2	3337.1
80°	4111.4	3127.1	2285.8	1606.8	1180.9	981.3	866.7	811.6
82.5°	1280.6	826.5	609.0	525.7	488.4	467.6	433.3	378.2
85°	408.0	357.4	332.1	317.2	302.3	263.6	181.7	165.3
87.5°	157.8	162.3	160.8	151.9	154.9	111.7	89.3	78.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)