

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: P300361

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-AFL-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8739.8 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

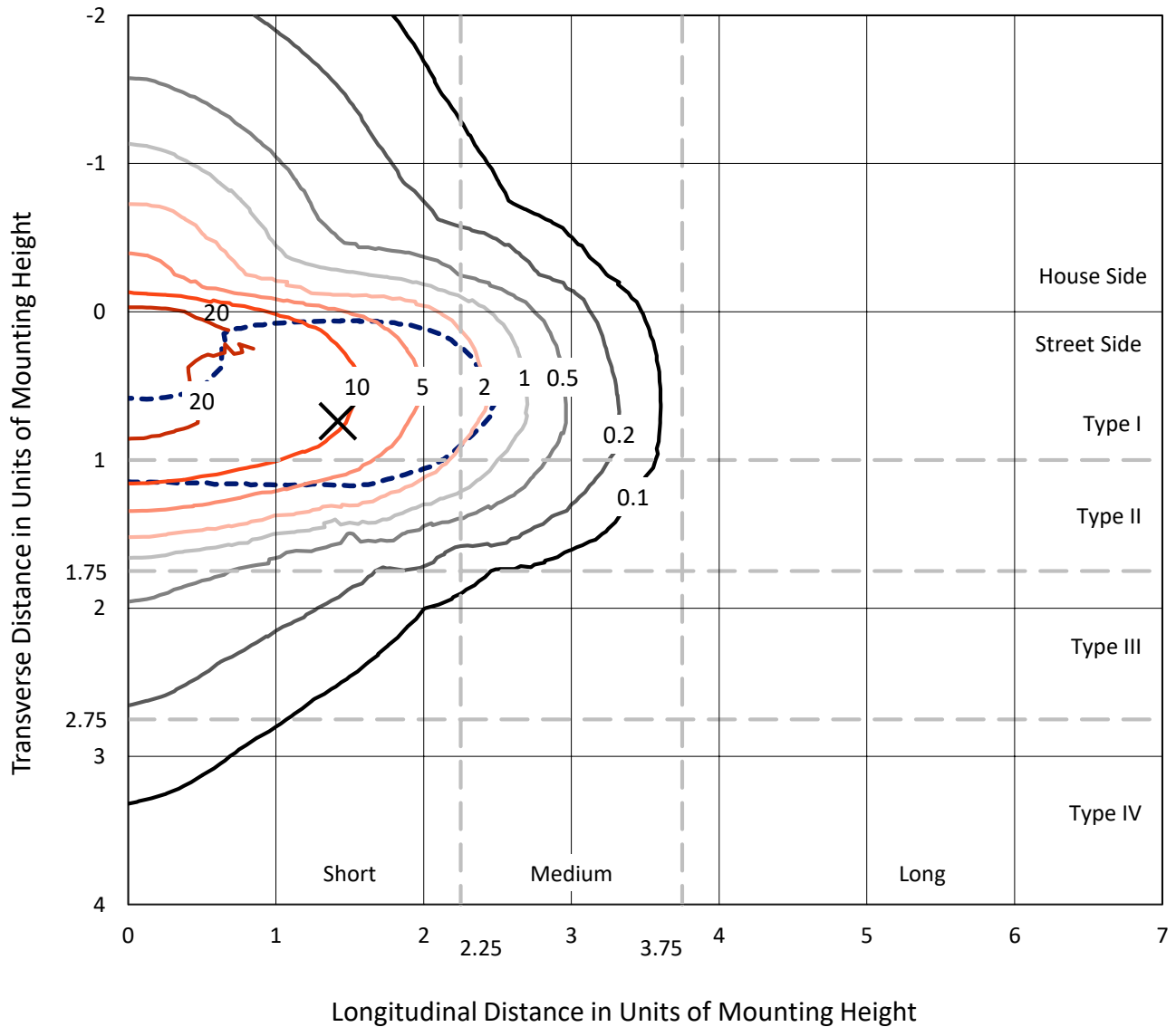
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

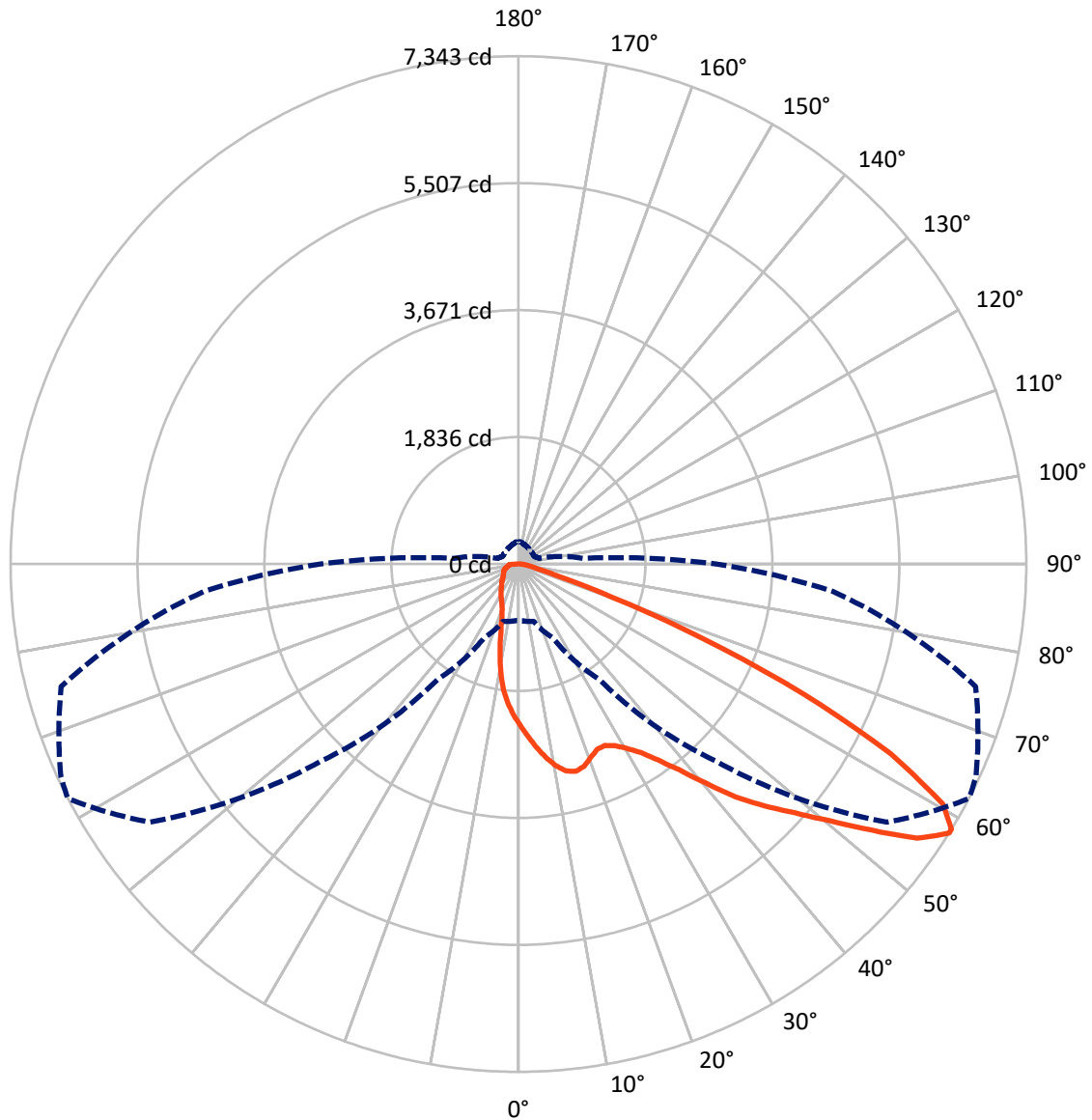
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 28.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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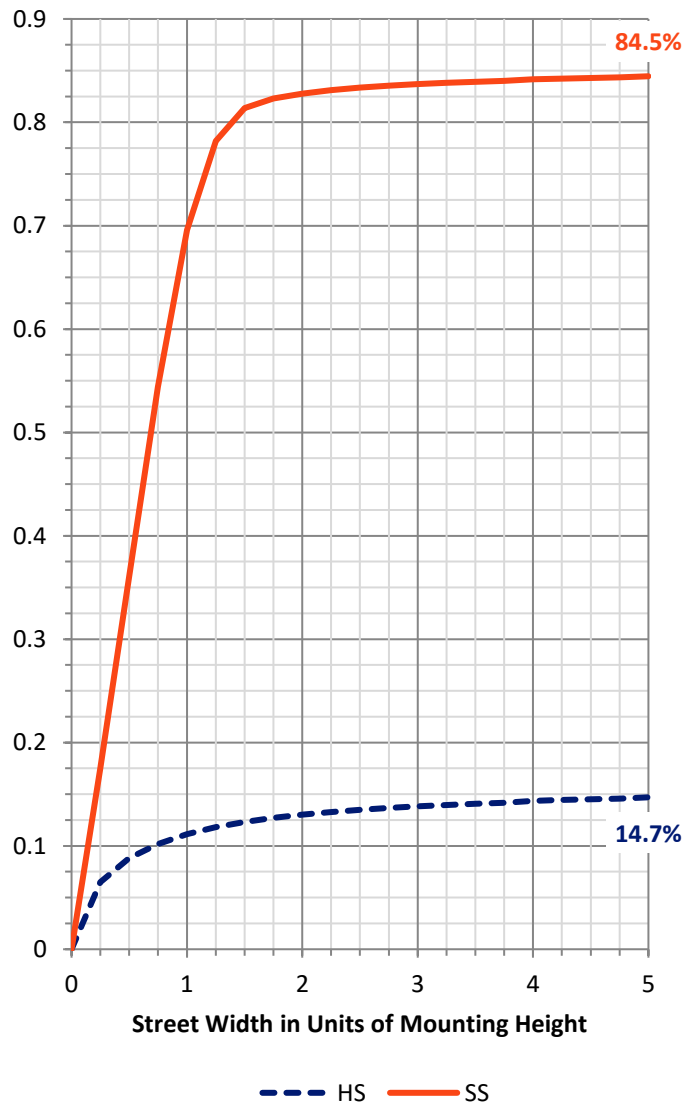
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1332.9	0.0	1332.9
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	7407.0	0.0	7407.0
	% Fixture	84.7	0.0	84.7
Total	Lumens	8739.8	0.0	8739.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.6	2.4
10°-20°	530.7	6.1
20°-30°	857.9	9.8
30°-40°	1362.0	15.6
40°-50°	1992.9	22.8
50°-60°	2084.4	23.8
60°-70°	1231.4	14.1
70°-80°	346.9	4.0
80°-90°	126.0	1.4
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°	8739.8	100.0
0°-180°	8739.8	100.0

Coefficient of Utilization



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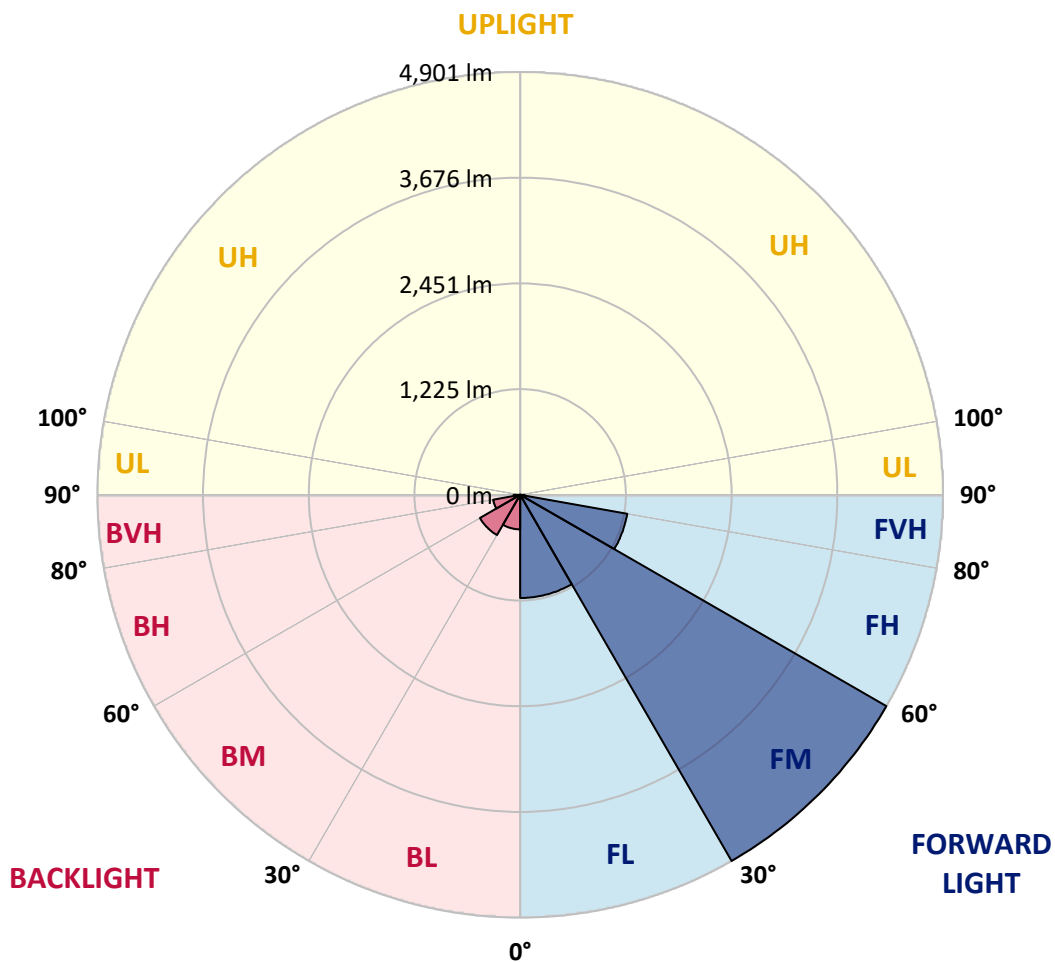
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1195.7	13.7			
FM	(30°-60°)	4901.2	56.1			
FH	(60°-80°)	1260.3	14.4			G1/1800
FVH	(80°-90°)	49.7	0.6			G1/100
BL	(0°-30°)	400.6	4.6	B1/500		
BM	(30°-60°)	538.0	6.2	B1/1000		
BH	(60°-80°)	318.0	3.6	B1/500		G1/500
BVH	(80°-90°)	76.3	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6
2.5°	2652.9	2631.5	2617.9	2605.9	2590.3	2557.0	2512.1	2483.7	2469.3	2420.3	2362.3
5°	2913.0	2894.0	2880.0	2864.0	2836.0	2783.7	2711.3	2653.7	2625.3	2527.3	2411.3
7.5°	2852.0	2859.9	2884.1	2926.5	2962.8	2955.8	2891.1	2817.9	2780.4	2644.2	2468.1
10°	2484.9	2498.5	2540.5	2639.7	2800.2	2964.8	3015.0	2964.4	2926.5	2759.9	2526.5
12.5°	2411.3	2410.9	2414.2	2440.5	2536.0	2767.7	3019.1	3070.2	3047.5	2870.2	2586.2
15°	2441.3	2442.1	2439.7	2450.8	2480.4	2572.2	2893.2	3110.9	3127.0	2981.3	2647.9
17.5°	2520.3	2518.3	2508.8	2508.8	2519.5	2555.3	2745.0	3073.1	3147.1	3079.6	2702.2
20°	2652.9	2643.4	2618.3	2595.2	2583.7	2603.1	2684.1	2985.8	3112.1	3165.6	2747.1
22.5°	2813.4	2806.0	2765.2	2715.8	2675.9	2675.5	2715.4	2909.7	3051.6	3246.7	2785.0
25°	3020.8	3008.8	2948.4	2869.3	2799.4	2772.6	2783.7	2906.0	3018.7	3334.8	2818.7
27.5°	3264.4	3242.6	3171.0	3057.0	2954.1	2900.2	2884.1	2973.0	3048.8	3443.9	2865.6
30°	3559.9	3534.8	3443.0	3294.5	3149.2	3060.7	3026.5	3092.0	3148.4	3576.8	2940.9
32.5°	3896.2	3859.9	3753.8	3590.0	3399.0	3264.0	3208.5	3249.2	3294.1	3736.9	3035.2
35°	4360.8	4317.6	4164.1	3938.1	3722.5	3536.9	3448.0	3477.6	3521.2	3975.6	3171.4
37.5°	4677.7	4658.3	4556.3	4343.9	4109.3	3895.7	3758.3	3775.6	3800.3	4274.0	3345.9
40°	4674.8	4682.6	4684.7	4686.7	4527.1	4322.5	4174.8	4156.7	4151.7	4601.5	3544.3
42.5°	4440.6	4472.7	4576.4	4786.7	4883.9	4790.0	4654.6	4602.4	4576.4	4987.6	3754.6
45°	4082.2	4099.5	4293.7	4704.4	5066.6	5253.0	5150.6	4985.9	4939.0	5342.3	3929.1
47.5°	3897.4	3916.3	4038.5	4486.3	5064.5	5627.1	5686.4	5372.8	5288.8	5651.0	4079.7
50°	3457.4	3496.9	3650.9	4106.9	4879.8	5799.2	6246.5	5833.7	5660.1	5951.4	4230.7
52.5°	2649.6	2710.5	2882.9	3483.0	4411.0	5714.0	6694.7	6392.6	6147.3	6262.6	4360.4
55°	1671.3	1716.6	1861.4	2459.8	3528.6	5270.7	6864.7	6997.2	6779.1	6557.2	4472.7
57.5°	908.7	928.9	983.2	1358.1	2295.2	4290.8	6616.9	7341.2	7250.7	6807.5	4557.5
58°	813.2	826.8	860.6	1177.0	2035.5	4022.9	6507.0	7342.5	7297.2	6844.1	4564.1
60°	603.3	596.3	566.3	671.7	1133.0	2779.2	5842.8	7048.6	7181.6	6888.9	4532.0
62.5°	530.1	513.2	451.9	444.9	551.1	1280.3	4470.7	6037.9	6351.9	6633.0	4336.9
65°	498.0	479.9	400.9	375.3	397.6	541.6	2633.5	4528.3	4922.1	5856.8	3838.1
67.5°	474.1	450.6	368.3	333.4	335.0	358.0	1055.6	2852.0	3295.3	4446.8	2985.4
70°	451.1	425.5	340.8	300.4	291.0	283.1	419.8	1427.7	1829.8	2808.8	1903.4
72.5°	426.4	401.3	316.5	274.5	256.0	230.1	274.1	584.0	815.7	1328.9	863.4
75°	390.6	367.9	292.2	251.5	225.1	190.5	207.0	305.0	365.9	529.3	416.1
77.5°	346.5	328.0	265.0	232.5	199.6	154.7	159.3	211.5	234.6	302.9	247.3
80°	249.0	255.6	235.8	209.1	177.8	125.5	122.2	154.3	166.7	194.7	160.9
82.5°	174.9	178.6	195.1	170.8	146.9	98.8	90.1	108.6	116.1	128.0	86.8
85°	120.6	116.5	133.8	118.9	106.2	65.8	61.7	73.7	78.2	79.4	44.9
87.5°	72.4	72.4	77.4	63.8	57.2	34.2	33.3	42.0	44.9	42.8	24.7
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°	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6	2321.6
2.5°	2327.7	2298.5	2236.4	2186.6	2123.6	2058.2	2021.5	1982.4	1955.7	1936.3	1967.2
5°	2345.4	2285.8	2157.3	2035.5	1901.0	1761.0	1654.8	1556.1	1487.3	1444.5	1484.9
7.5°	2373.4	2281.6	2077.1	1868.9	1627.3	1394.3	1186.1	1055.6	979.5	942.0	965.5
10°	2405.5	2275.1	1982.9	1642.9	1297.2	1003.8	848.2	795.5	778.2	771.2	774.5
12.5°	2432.3	2261.1	1867.2	1369.6	974.1	792.6	747.8	746.6	750.3	751.1	752.3
15°	2451.2	2240.5	1695.6	1084.8	779.1	722.3	719.8	727.2	734.2	737.1	738.7
17.5°	2464.0	2198.1	1501.7	857.7	698.0	688.1	693.9	703.3	710.7	712.8	714.5
20°	2462.7	2135.9	1270.9	715.3	654.0	654.0	663.8	671.2	671.7	669.2	670.4
22.5°	2450.0	2050.8	1047.0	639.5	614.9	621.9	631.7	624.7	595.9	577.0	578.2
25°	2428.6	1949.1	855.2	591.4	578.6	591.0	588.1	535.4	494.3	475.8	475.8
27.5°	2409.6	1828.9	707.9	549.4	542.4	557.7	506.6	458.9	441.6	433.0	430.1
30°	2396.0	1699.3	609.5	509.1	508.3	497.2	439.5	426.4	423.5	416.5	414.0
32.5°	2399.3	1568.0	546.5	473.7	476.6	425.5	407.4	410.3	407.8	400.4	397.1
35°	2426.5	1443.3	505.4	441.6	433.0	384.4	388.5	393.9	393.0	382.7	379.4
37.5°	2475.1	1325.2	478.2	414.8	377.8	363.8	370.4	378.6	376.6	369.6	367.1
40°	2526.1	1214.1	456.0	393.9	345.3	349.8	355.6	360.1	362.2	364.2	362.6
42.5°	2575.9	1098.0	428.8	372.5	331.7	336.6	339.1	343.6	354.8	362.6	362.2
45°	2605.5	989.0	400.9	342.0	321.0	323.9	322.2	331.3	344.9	357.6	358.0
47.5°	2638.5	904.2	378.6	314.0	310.7	312.8	307.8	316.9	329.2	344.9	346.5
50°	2678.4	853.6	360.9	291.8	296.7	296.7	295.5	303.7	321.0	339.1	342.4
52.5°	2723.6	843.7	346.1	275.7	282.7	282.3	283.6	295.9	314.8	332.5	335.4
55°	2778.8	870.4	330.1	263.8	269.2	270.8	274.9	288.9	305.0	325.1	326.4
57.5°	2843.0	924.8	317.3	254.3	256.8	262.2	268.7	281.5	298.8	321.0	322.2
58°	2853.7	936.3	315.2	253.5	254.3	260.5	267.9	280.3	297.6	321.8	323.1
60°	2854.1	974.6	310.7	249.8	244.9	255.2	263.4	275.7	295.5	324.7	327.6
62.5°	2752.9	974.1	307.4	244.5	235.0	247.8	257.2	271.6	293.4	331.7	337.5
65°	2424.0	885.2	291.8	236.2	227.2	241.2	251.9	268.7	299.2	362.2	365.9
67.5°	1896.0	725.6	262.6	224.7	216.9	234.6	248.6	268.3	305.4	369.2	371.6
70°	1253.6	542.8	230.5	211.5	206.2	226.8	250.2	282.3	298.4	354.3	347.8
72.5°	650.7	381.1	204.5	195.1	193.8	219.8	274.1	280.7	291.4	333.4	325.1
75°	341.6	264.6	181.9	177.0	179.0	218.1	323.5	273.3	282.3	319.0	334.6
77.5°	209.1	213.6	162.6	160.5	164.6	213.2	323.1	263.8	269.2	293.4	310.7
80°	139.9	173.3	147.7	148.2	151.0	195.1	290.1	249.0	253.1	277.4	295.1
82.5°	88.5	102.5	134.2	141.2	137.5	160.9	246.5	226.8	232.5	317.3	335.4
85°	44.9	64.2	116.5	135.8	123.9	112.8	200.0	198.8	201.7	228.8	239.1
87.5°	20.6	35.4	91.0	118.5	93.4	70.4	145.3	147.3	158.9	162.6	162.6
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)