

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: P322698

Luminaire Tested: **GLEON-SA4D-827-U-T4FT-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA4D-827-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16339 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

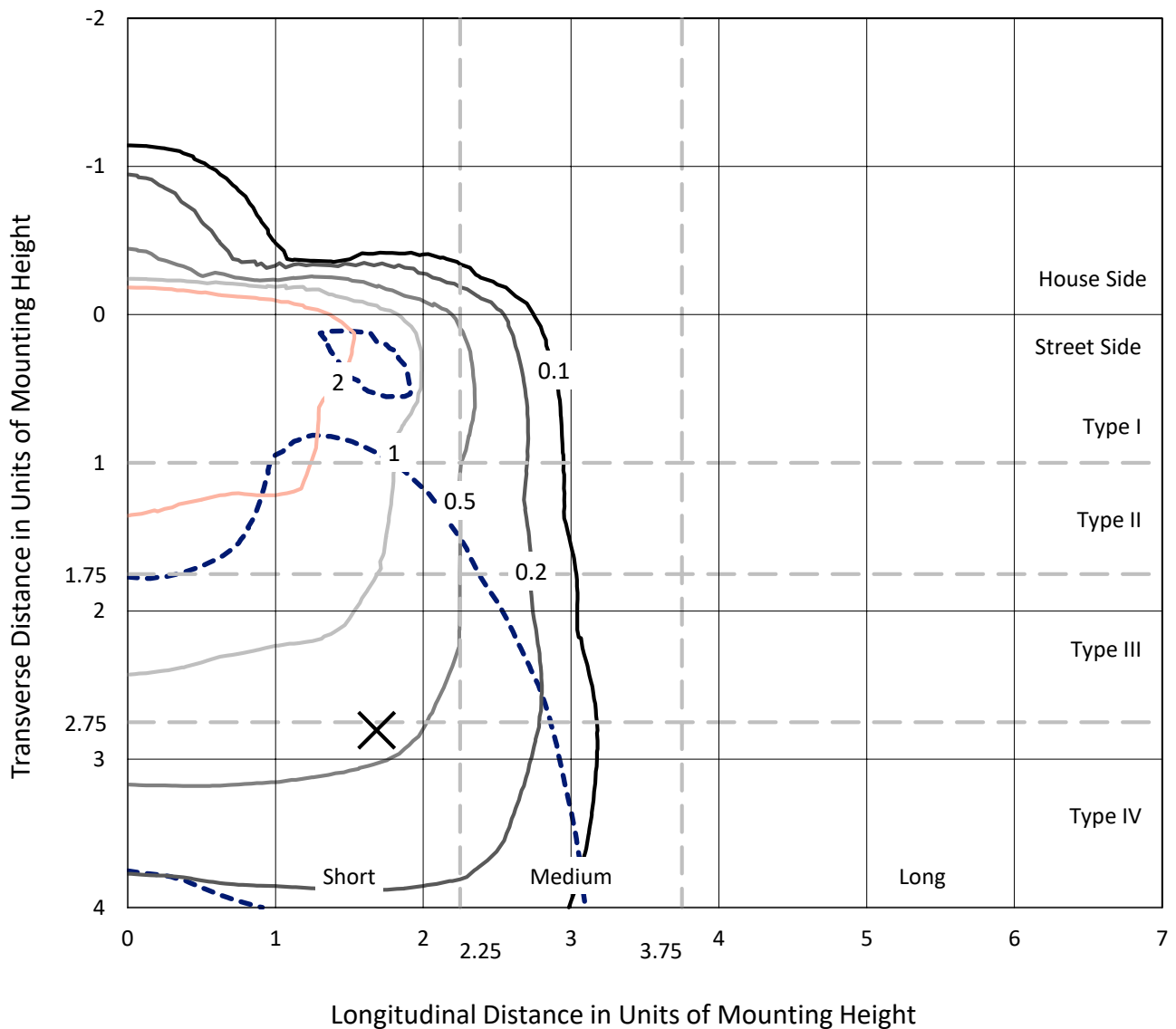
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

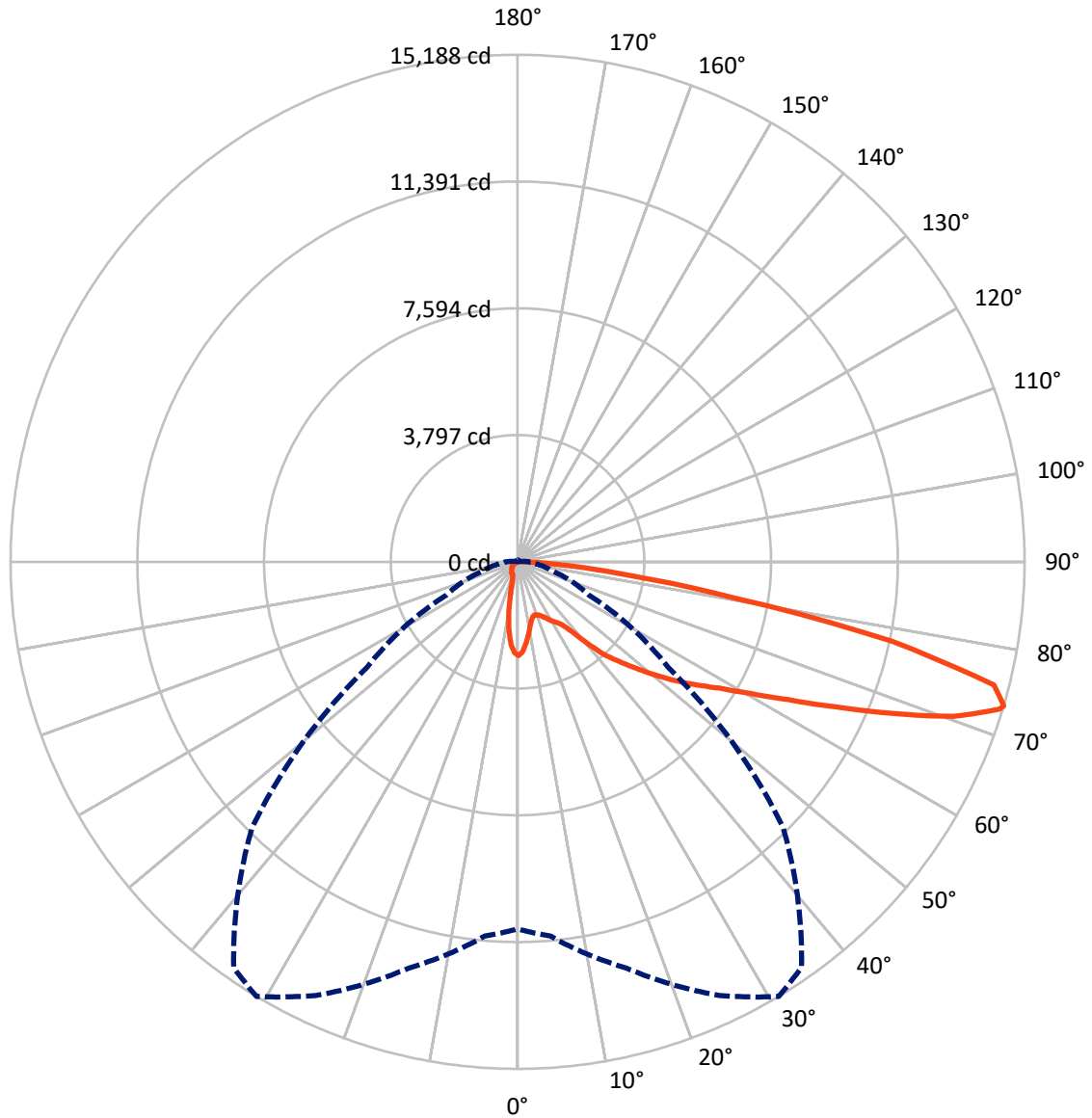
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 31-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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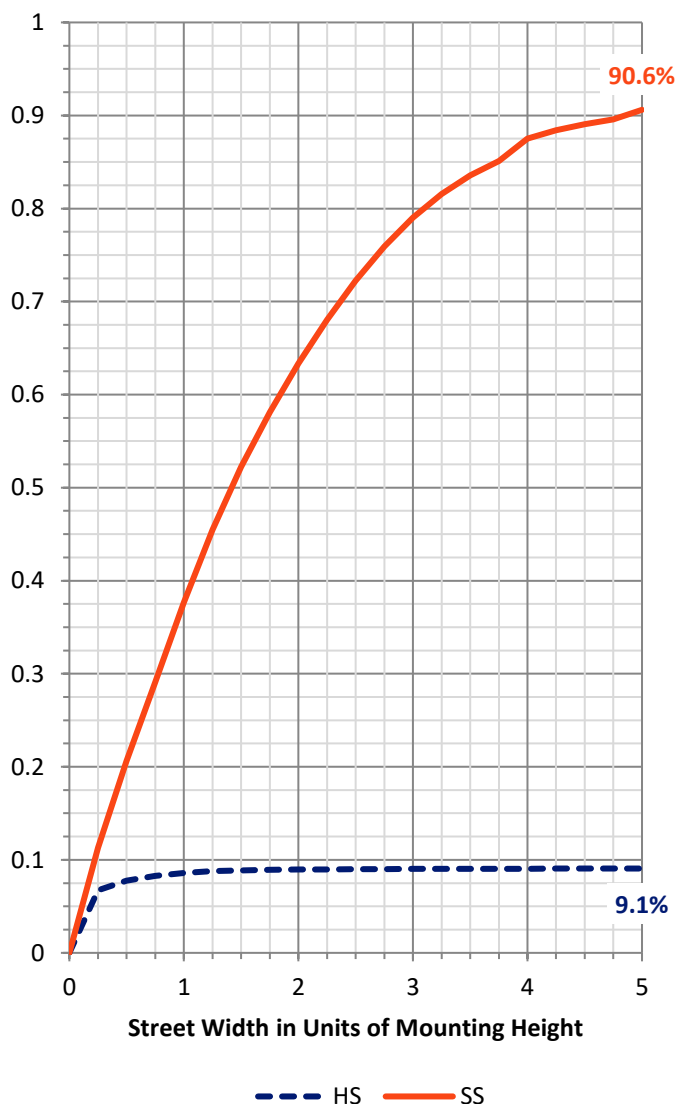
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1489.4	0.0	1489.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	14849.6	0.0	14849.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	16339.0	0.0	16339.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.1	1.4
10°-20°	506.1	3.1
20°-30°	758.3	4.6
30°-40°	1206.4	7.4
40°-50°	2154.3	13.2
50°-60°	3342.9	20.5
60°-70°	4443.9	27.2
70°-80°	3342.7	20.5
80°-90°	351.3	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°	16339.0	100.0
0°-180°	16339.0	100.0

Coefficient of Utilization



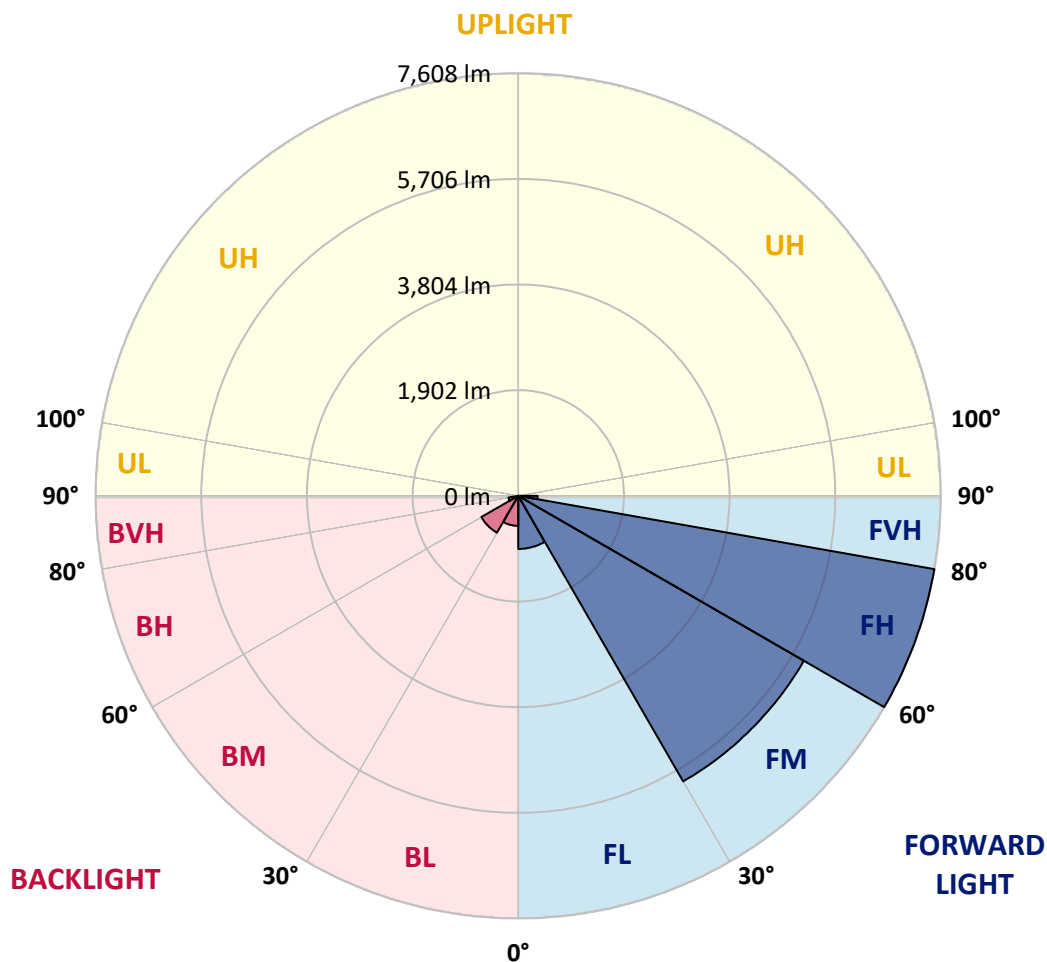
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	955.9	5.9			
FM (30°-60°)	5937.0	36.3			
FH (60°-80°)	7608.5	46.6			G4/12000
FVH (80°-90°)	348.3	2.1			G3/500
BL (0°-30°)	541.6	3.3	B2/1000		
BM (30°-60°)	766.6	4.7	B1/1000		
BH (60°-80°)	178.2	1.1	B1/500		G1/500
BVH (80°-90°)	3.0	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	31°	35°	45°	55°	65°	75°	85°
0°	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2
2.5°	2664.0	2675.2	2687.2	2689.6	2709.6	2710.4	2739.2	2760.8	2782.4	2803.2	2810.4
5°	2390.6	2409.0	2430.6	2452.2	2494.5	2511.3	2581.7	2653.7	2722.4	2788.0	2820.0
7.5°	2098.8	2119.6	2149.9	2203.5	2250.7	2283.5	2394.6	2522.5	2650.5	2771.2	2840.7
10°	1832.5	1851.7	1883.7	1940.5	2013.2	2058.0	2207.5	2385.0	2572.9	2756.0	2871.9
12.5°	1663.0	1673.4	1691.0	1751.8	1817.3	1867.7	2043.6	2263.5	2508.9	2755.2	2922.3
15°	1631.8	1635.0	1620.7	1647.8	1699.0	1747.8	1926.1	2165.1	2460.2	2768.0	2987.9
17.5°	1681.4	1679.8	1631.8	1628.6	1669.4	1709.4	1868.5	2097.2	2425.8	2797.6	3072.6
20°	1756.6	1751.0	1667.8	1652.6	1695.8	1733.4	1864.5	2071.6	2413.0	2847.1	3175.7
22.5°	1856.5	1846.9	1716.6	1700.6	1747.0	1786.2	1914.1	2096.4	2424.2	2913.5	3295.7
25°	1980.4	1966.1	1800.5	1783.0	1830.1	1869.3	2002.8	2167.5	2457.8	2994.3	3447.6
27.5°	2120.4	2099.6	1934.9	1889.3	1942.9	1983.6	2121.2	2276.3	2510.5	3079.8	3633.9
30°	2252.3	2225.1	2076.4	2001.2	2066.8	2112.4	2249.1	2405.8	2595.3	3211.7	3888.9
32.5°	2385.0	2354.6	2202.7	2113.2	2172.3	2221.9	2381.0	2584.1	2754.4	3413.2	4227.9
35°	2690.4	2658.4	2472.2	2324.2	2323.4	2351.4	2565.7	2827.9	2964.7	3693.8	4632.5
37.5°	3204.5	3186.1	3008.6	2728.0	2652.9	2621.7	2817.6	3119.0	3266.9	4080.0	5089.0
40°	3767.4	3751.4	3552.3	3298.1	3183.7	3107.0	3178.9	3524.3	3693.8	4551.7	5555.2
42.5°	4403.0	4327.1	3972.1	3896.1	3793.8	3735.4	3670.7	4024.1	4218.3	5065.0	6017.3
45°	4980.3	4852.4	4391.8	4276.7	4253.5	4267.9	4303.9	4695.7	4808.4	5675.1	6477.8
47.5°	5324.1	5223.3	4870.0	4759.6	4753.2	4848.4	5120.2	5454.4	5396.0	6206.8	6883.2
50°	5651.1	5560.0	5266.5	5293.7	5323.3	5452.8	6046.9	6234.8	5932.5	6688.9	7255.0
52.5°	5915.7	5776.6	5623.1	5775.8	5921.3	6130.0	7003.1	6935.2	6313.1	7072.7	7573.2
55°	6068.5	6005.3	6079.6	6233.2	6506.6	6845.6	7905.8	7518.0	6591.4	7422.9	7785.1
57.5°	6628.1	6504.2	6652.1	6784.8	7141.4	7615.6	8678.9	7952.2	6792.0	7639.5	7833.8
60°	7305.3	7205.4	7292.5	7513.2	7994.5	8551.8	9401.7	8306.3	6896.8	7778.7	7707.5
62.5°	8383.1	8251.2	8196.8	8443.9	9081.9	9690.3	9950.2	8551.8	6873.6	7717.1	7274.2
65°	9827.1	9690.3	9447.3	9671.2	10482.7	10912.0	10563.4	8603.8	6713.7	7219.0	6178.8
67.5°	11306.2	11207.1	10999.2	11376.6	12108.9	12247.2	11211.9	8477.4	6198.8	5853.4	4365.5
70°	12283.2	12240.9	12376.0	13210.7	13863.9	13823.9	11806.7	7798.6	4831.6	3599.5	2159.5
72.5°	11578.8	11781.9	12779.7	14293.3	15091.2	14765.0	11501.3	5988.5	2761.6	1384.8	624.4
73°	10995.2	11255.0	12598.2	14334.0	15187.9	14830.5	11244.6	5496.8	2353.8	1093.0	473.3
75°	7649.1	7968.1	10429.9	13349.8	14735.4	14130.1	9372.9	3364.4	1090.6	484.5	191.1
77.5°	3713.8	3949.7	5743.0	9645.6	11459.7	11040.0	5835.0	1253.7	492.5	303.0	87.9
80°	1386.4	1541.5	2492.9	4909.1	6622.5	6796.0	2566.5	474.1	327.8	243.9	44.8
82.5°	363.0	404.6	919.5	2189.1	3394.0	3552.3	809.1	239.1	239.9	200.7	27.2
85°	115.9	132.7	287.0	982.6	1599.1	1404.0	211.1	115.9	174.3	149.5	15.2
87.5°	14.4	18.4	91.1	231.1	352.6	195.9	32.8	34.4	74.4	83.2	8.8
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°	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2	2811.2
2.5°	2817.6	2813.6	2814.4	2793.6	2780.0	2752.8	2724.8	2712.0	2698.4	2692.8	2698.4
5°	2831.9	2824.8	2804.0	2740.0	2672.0	2584.1	2501.7	2439.4	2361.0	2339.4	2361.8
7.5°	2854.3	2839.9	2779.2	2648.9	2497.7	2329.8	2141.1	2003.6	1890.9	1818.1	1844.5
10°	2887.1	2859.9	2737.6	2516.1	2245.9	1948.5	1680.6	1471.9	1324.0	1263.3	1260.9
12.5°	2942.3	2891.1	2686.4	2343.4	1938.1	1541.5	1190.5	964.2	844.3	766.8	765.2
15°	3003.0	2927.9	2621.7	2136.4	1579.9	1104.2	766.8	594.9	517.3	492.5	489.3
17.5°	3077.4	2970.3	2537.7	1881.3	1204.9	731.6	500.5	450.9	447.7	445.3	445.3
20°	3170.9	3020.6	2429.8	1589.5	854.7	488.5	425.4	428.5	430.1	427.0	427.8
22.5°	3279.7	3071.8	2301.1	1276.1	578.1	408.6	407.0	411.0	412.6	411.0	411.8
25°	3406.0	3131.0	2144.3	947.4	417.4	387.8	391.8	397.4	401.4	401.4	401.4
27.5°	3562.7	3202.9	1955.7	661.2	360.6	366.2	377.4	387.8	393.4	395.0	395.0
30°	3766.6	3292.5	1729.4	453.3	327.8	337.4	358.2	378.2	388.6	390.2	391.0
32.5°	4024.1	3393.2	1467.1	335.0	299.8	307.0	329.4	363.0	383.0	386.2	386.2
35°	4319.1	3510.0	1184.9	291.8	279.8	282.2	299.8	338.2	373.4	382.2	383.0
37.5°	4642.1	3625.1	901.1	272.6	263.0	263.0	275.8	308.6	350.2	377.4	380.6
40°	4943.5	3694.6	631.6	257.4	247.9	247.9	259.0	283.0	322.2	363.0	371.8
42.5°	5221.8	3718.6	439.7	243.1	233.5	235.9	245.5	264.6	294.2	335.0	343.0
45°	5508.0	3714.6	320.6	226.3	219.1	226.3	233.5	247.9	269.4	292.6	294.2
47.5°	5723.9	3681.1	254.3	210.3	205.5	215.1	221.5	231.1	243.1	241.5	241.5
50°	5926.1	3599.5	204.7	188.7	191.9	203.1	206.3	209.5	210.3	195.1	193.5
52.5°	6079.6	3472.4	163.9	165.5	178.3	189.5	186.3	181.5	173.5	155.1	151.9
55°	6130.8	3227.7	128.7	136.7	158.3	172.7	160.7	150.3	135.1	119.9	116.7
57.5°	6038.1	2911.9	104.7	106.3	133.5	145.5	131.9	119.9	103.1	90.3	87.9
60°	5841.4	2560.9	86.3	80.0	103.1	113.5	104.7	92.7	77.6	68.0	67.2
62.5°	5451.2	2186.7	71.2	62.4	78.4	87.1	81.6	72.8	60.0	53.6	52.8
65°	4630.9	1749.4	57.6	50.4	60.8	68.0	63.2	56.8	47.2	42.4	41.6
67.5°	3232.5	1182.5	47.2	41.6	48.0	53.6	49.6	46.4	37.6	36.8	37.6
70°	1559.1	570.1	39.2	33.6	37.6	41.6	40.0	37.6	36.0	41.6	48.0
72.5°	446.9	191.1	31.2	28.0	30.4	32.8	34.4	33.6	39.2	50.4	58.4
73°	343.8	154.3	29.6	26.4	28.8	32.0	33.6	32.8	40.0	51.2	58.4
75°	147.1	74.4	22.4	21.6	24.0	28.0	29.6	29.6	40.0	52.0	56.0
77.5°	66.4	40.0	14.4	16.8	20.8	22.4	24.8	24.8	32.0	40.0	40.0
80°	37.6	21.6	11.2	12.8	15.2	15.2	15.2	13.6	14.4	16.0	17.6
82.5°	24.0	14.4	8.8	10.4	9.6	8.0	6.4	6.4	5.6	6.4	8.0
85°	13.6	8.0	8.0	6.4	4.0	3.2	4.0	3.2	0.8	0.0	0.8
87.5°	8.0	4.8	2.4	0.0	0.0	0.0	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)