

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: P320137

Luminaire Tested: **GLEON-SA3D-827-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA3D-827-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16548 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

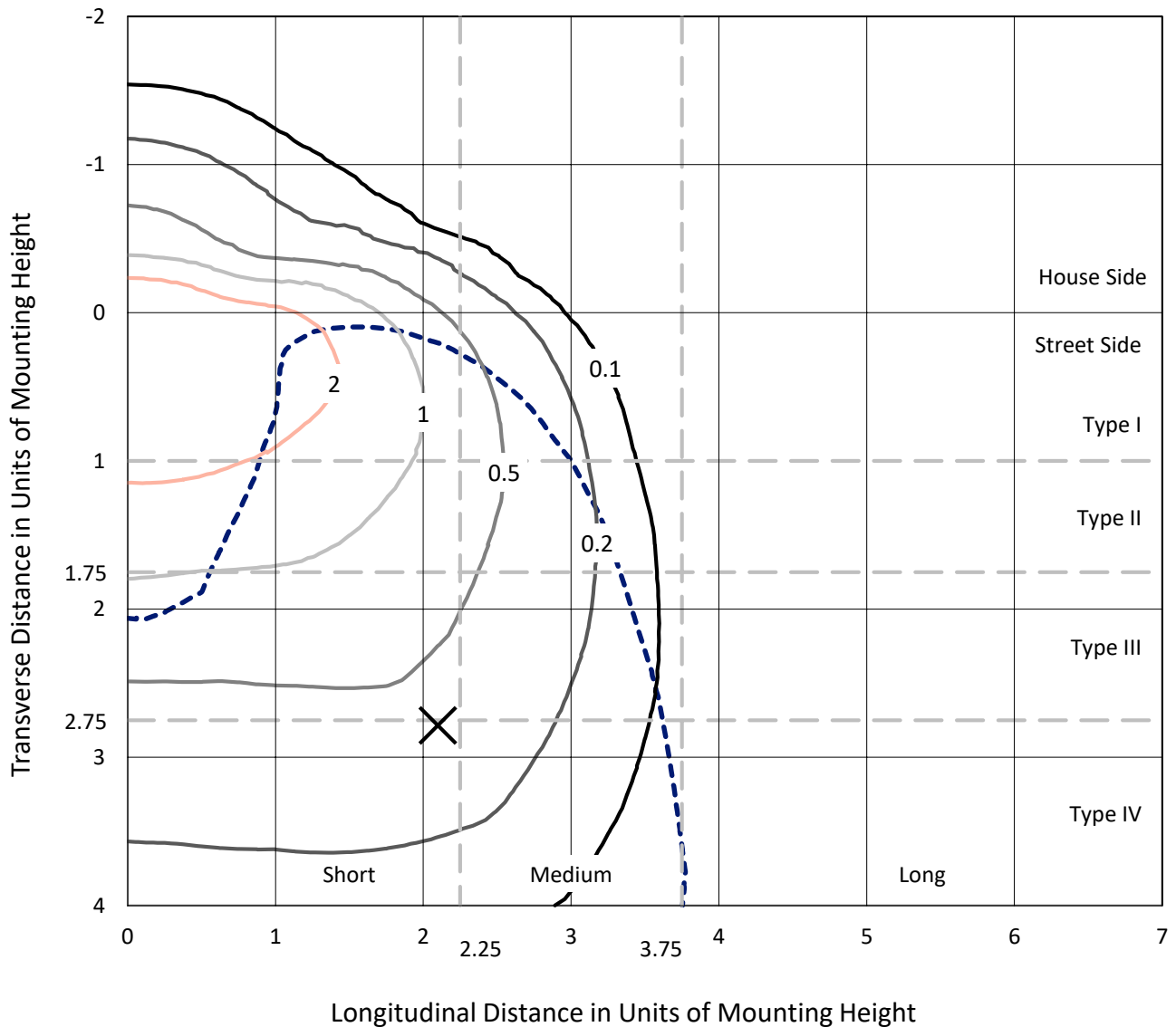
Input Watts (W): 191
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

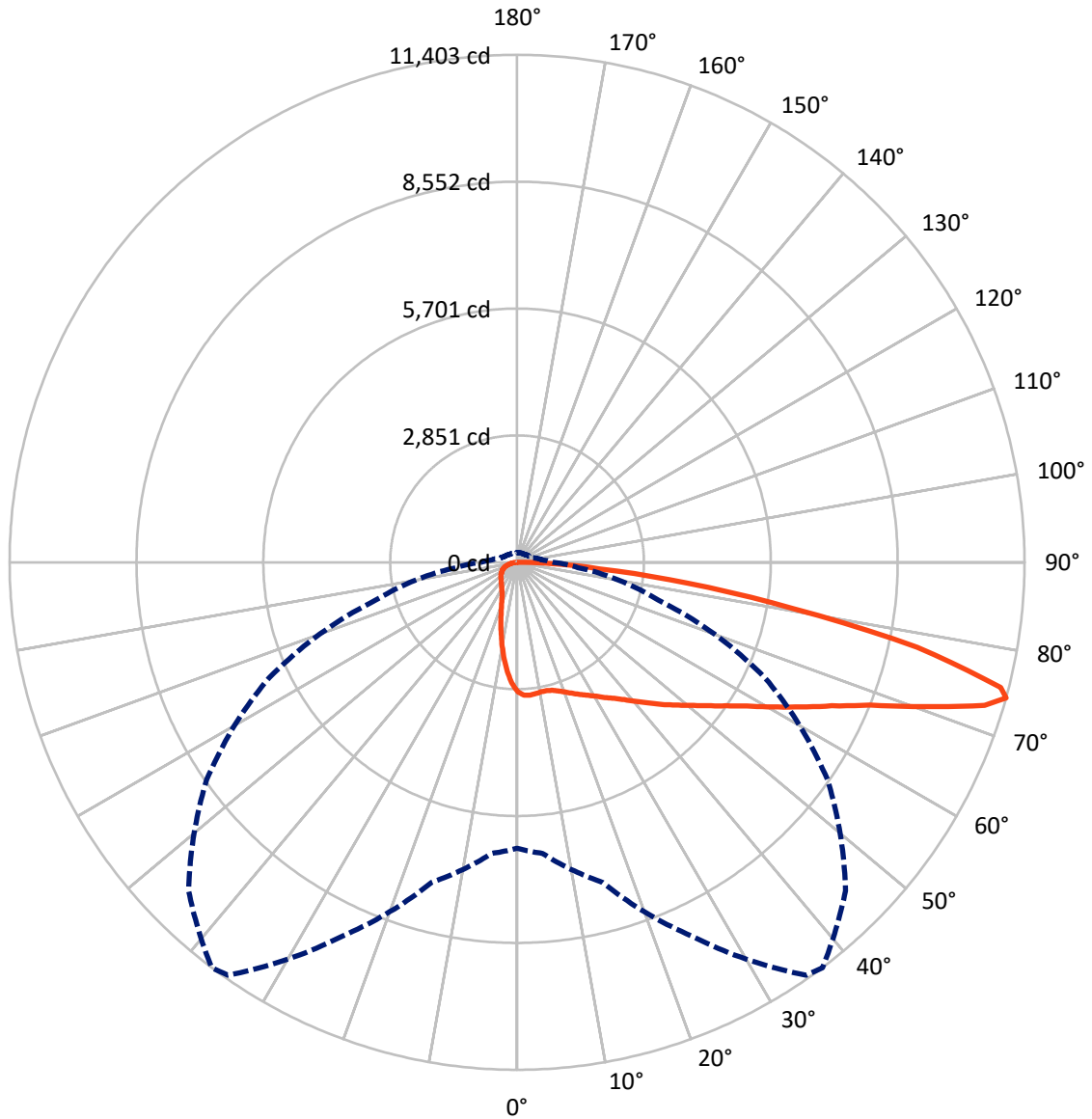
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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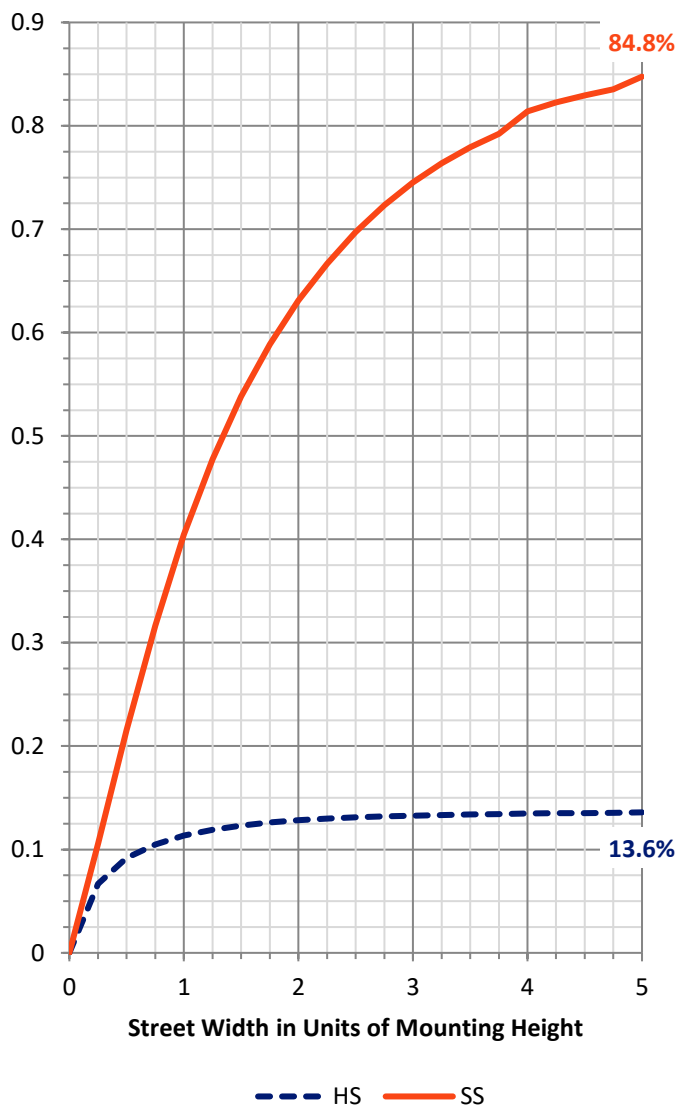
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2276.9	0.0	2276.9
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	14271.1	0.0	14271.1
	% Fixture	86.2	0.0	86.2
Total	Lumens	16548.0	0.0	16548.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.8	1.6
10°-20°	658.1	4.0
20°-30°	1014.1	6.1
30°-40°	1474.6	8.9
40°-50°	2170.4	13.1
50°-60°	3047.9	18.4
60°-70°	3857.7	23.3
70°-80°	3396.8	20.5
80°-90°	671.6	4.1
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°	16548.0	100.0
0°-180°	16548.0	100.0

Coefficient of Utilization



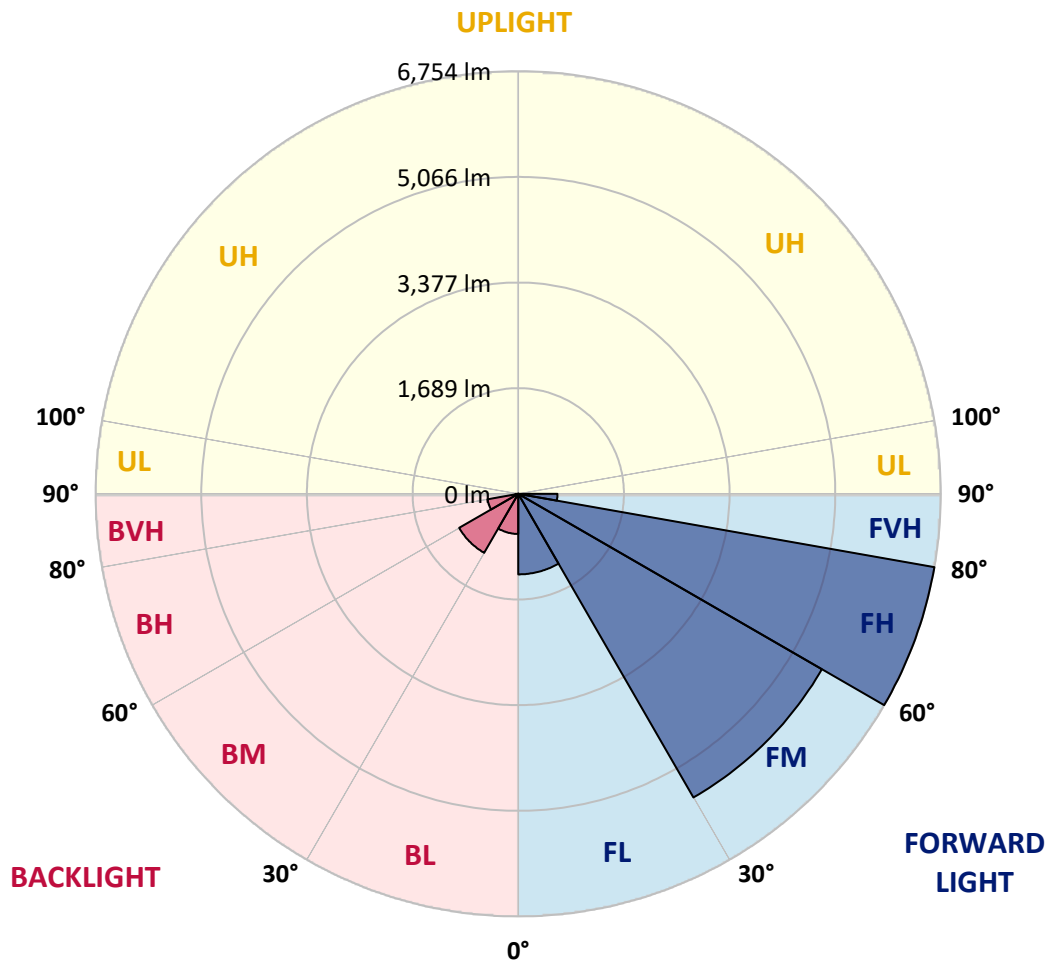
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1287.6	7.8			
FM (30°-60°)	5603.3	33.9			
FH (60°-80°)	6754.0	40.8			G3/7500
FVH (80°-90°)	626.1	3.8			G4/750
BL (0°-30°)	641.3	3.9	B2/1000		
BM (30°-60°)	1089.6	6.6	B2/2500		
BH (60°-80°)	500.5	3.0	B2/1000		G2/1000
BVH (80°-90°)	45.5	0.3			G1/100
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°	35°	37°	45°	55°	65°	75°	85°
0°	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7
2.5°	3015.4	3016.0	3015.4	3010.7	2999.6	2990.3	2982.7	2971.7	2947.2	2928.5	2900.5
5°	3043.9	3040.4	3038.1	3029.4	3011.9	3001.4	2986.8	2965.8	2925.6	2888.3	2842.8
7.5°	3030.5	3026.4	3021.2	3010.7	2990.9	2982.1	2961.7	2934.3	2886.0	2837.0	2771.7
10°	2989.1	2988.0	2985.6	2983.3	2966.4	2959.4	2940.8	2911.6	2863.8	2804.4	2728.0
12.5°	2943.1	2946.0	2955.3	2967.6	2960.0	2956.5	2944.8	2925.0	2876.1	2811.9	2719.8
15°	2913.9	2922.1	2947.2	2979.2	2985.6	2984.5	2981.6	2968.7	2916.9	2845.7	2738.5
17.5°	2904.0	2917.4	2965.2	3018.3	3036.9	3041.0	3042.2	3020.0	2962.3	2887.1	2757.7
20°	2922.1	2939.0	3009.0	3081.8	3111.5	3113.9	3108.6	3070.2	3005.5	2922.7	2768.2
22.5°	2976.9	2992.1	3079.5	3161.7	3195.5	3199.0	3183.2	3125.0	3050.9	2964.7	2782.8
25°	3082.4	3101.1	3188.5	3270.7	3288.2	3288.8	3266.0	3193.7	3110.4	3023.5	2814.3
27.5°	3220.0	3238.6	3317.3	3397.8	3388.4	3383.2	3352.3	3280.0	3187.9	3104.6	2870.2
30°	3373.3	3393.7	3468.3	3525.4	3503.3	3492.8	3467.7	3374.4	3295.7	3215.3	2955.9
32.5°	3531.8	3550.5	3615.8	3654.8	3626.8	3622.2	3584.3	3499.2	3436.2	3384.3	3094.6
35°	3694.5	3707.9	3772.0	3794.1	3756.8	3755.7	3745.2	3667.1	3627.4	3651.9	3296.3
37.5°	3860.6	3864.1	3918.9	3920.0	3909.0	3913.6	3924.7	3875.7	3886.8	3963.2	3558.6
40°	4008.6	4018.0	4057.6	4069.8	4089.1	4105.4	4160.8	4128.7	4214.4	4349.6	3885.1
42.5°	4118.2	4136.3	4199.8	4231.3	4293.7	4319.3	4397.4	4427.2	4599.7	4802.6	4273.3
45°	4210.9	4238.9	4340.9	4405.6	4511.1	4556.0	4667.9	4767.6	5035.1	5293.9	4681.9
47.5°	4311.2	4346.7	4474.4	4598.0	4741.4	4792.1	4995.5	5144.7	5499.7	5788.3	5067.2
50°	4458.6	4486.0	4610.8	4804.9	4983.8	5049.1	5330.7	5544.6	5971.9	6259.2	5401.2
52.5°	4664.4	4653.9	4759.4	5031.6	5271.8	5352.2	5688.6	5970.1	6450.4	6685.3	5683.3
55°	4871.3	4853.9	4927.9	5268.9	5607.6	5692.1	6082.6	6397.4	6905.7	7068.9	5899.6
57.5°	5101.6	5068.4	5130.7	5536.4	5989.9	6090.8	6523.9	6851.5	7353.4	7379.0	6037.2
60°	5338.8	5293.9	5363.9	5868.1	6475.5	6594.4	7040.3	7294.5	7775.4	7627.3	6081.5
62.5°	5546.3	5514.9	5622.7	6238.3	7022.8	7153.4	7547.5	7765.5	8191.6	7730.5	5921.7
65°	5727.6	5732.9	5919.4	6654.4	7633.1	7772.5	8129.2	8346.0	8519.2	7669.3	5548.1
67.5°	5943.9	5973.6	6291.9	7202.4	8401.4	8554.1	8975.6	8979.1	8702.2	7310.2	4812.5
70°	6259.2	6320.4	6804.3	7962.5	9493.8	9703.6	10028.9	9351.0	8445.1	6336.8	3786.6
72.5°	6539.0	6653.3	7349.3	8832.2	10825.1	10984.3	10645.0	9136.5	7370.8	4748.9	2359.0
74°	6425.4	6567.0	7448.4	9260.6	11326.4	11402.8	10436.9	8510.4	6145.6	3288.8	1371.0
75°	6180.5	6334.4	7303.8	9256.5	11262.9	11220.3	9934.5	7795.2	5061.4	2243.0	912.2
77.5°	4987.9	5150.6	6154.3	7933.3	9235.0	9194.8	7631.4	5229.2	2216.8	735.6	463.4
80°	2900.0	3024.1	3820.4	5038.1	6227.2	6300.0	5018.8	2587.5	872.0	413.3	314.2
82.5°	1288.2	1373.9	1845.5	2571.8	3758.0	3851.8	2628.3	1355.8	538.6	251.2	188.9
85°	845.2	908.7	1120.3	1224.7	1789.5	1853.6	1286.5	1055.6	355.6	138.1	138.7
87.5°	608.0	669.2	832.4	726.9	821.3	777.6	700.1	976.9	142.8	78.7	46.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7	2915.7
2.5°	2888.3	2879.0	2858.0	2818.3	2796.2	2777.5	2746.7	2728.6	2720.4	2719.8	2723.3
5°	2816.6	2795.0	2740.8	2674.4	2621.3	2572.9	2512.9	2476.8	2451.1	2436.0	2440.0
7.5°	2733.2	2699.4	2614.3	2508.2	2423.1	2329.3	2236.6	2181.2	2138.1	2106.0	2111.9
10°	2676.1	2629.5	2505.3	2352.6	2211.0	2074.6	1946.9	1870.5	1809.9	1763.3	1766.8
12.5°	2656.9	2593.9	2422.0	2218.0	2019.2	1832.7	1665.9	1548.8	1486.4	1433.4	1437.4
15°	2659.8	2575.3	2352.0	2096.7	1846.6	1611.7	1409.5	1272.5	1188.0	1151.2	1151.8
17.5°	2662.1	2553.7	2278.6	1966.7	1675.9	1405.4	1185.6	1046.9	967.0	933.2	933.8
20°	2654.6	2518.7	2187.6	1817.5	1497.5	1215.9	1003.2	885.4	824.8	798.6	798.6
22.5°	2644.6	2477.3	2085.1	1667.7	1321.4	1051.6	872.6	782.8	747.9	730.4	729.8
25°	2649.3	2446.5	1980.1	1513.8	1159.4	920.4	785.8	726.3	703.0	691.9	691.3
27.5°	2674.4	2431.9	1883.4	1360.5	1017.8	821.9	727.5	685.5	670.3	663.3	663.3
30°	2719.8	2431.9	1782.5	1229.9	900.0	749.0	682.6	654.0	643.5	638.9	638.9
32.5°	2799.1	2445.3	1685.2	1100.5	806.2	691.9	645.3	626.0	617.9	615.5	615.5
35°	2935.5	2490.8	1590.2	978.1	730.4	645.3	609.7	598.6	592.8	592.2	594.0
37.5°	3127.3	2583.4	1501.0	887.8	676.8	607.4	580.0	571.2	567.7	570.7	573.0
40°	3368.6	2709.3	1420.0	806.2	635.9	577.1	552.6	546.8	545.0	549.1	552.6
42.5°	3660.1	2879.6	1353.5	747.3	604.5	551.4	529.3	522.3	520.5	525.2	529.9
45°	3975.4	3062.6	1306.9	703.6	580.0	532.2	508.9	501.3	497.8	500.1	505.4
47.5°	4262.2	3235.7	1288.2	672.7	556.7	515.9	490.8	481.5	475.7	474.5	478.6
50°	4504.1	3364.5	1297.0	654.0	538.0	497.8	473.3	462.8	454.1	448.8	451.8
52.5°	4680.1	3445.6	1305.1	645.9	523.4	478.0	454.1	444.2	432.5	423.8	423.8
55°	4807.8	3464.2	1287.1	639.4	512.4	456.4	432.5	423.2	411.5	401.6	400.5
57.5°	4857.9	3411.7	1220.0	630.1	504.8	436.0	409.8	402.8	392.9	381.2	380.6
60°	4790.3	3249.7	1090.6	610.3	494.9	419.1	387.0	382.4	377.7	366.6	366.1
62.5°	4518.7	2894.1	923.3	570.1	475.1	401.0	366.1	368.4	369.0	361.4	360.2
65°	4026.1	2405.7	760.1	517.6	445.3	379.5	344.5	355.6	362.0	360.8	359.1
67.5°	3310.3	1872.3	644.1	462.2	406.3	349.7	321.2	334.0	339.3	343.3	342.2
70°	2456.9	1320.3	532.8	404.0	359.1	314.8	290.9	297.3	293.8	298.4	300.2
72.5°	1369.8	792.2	434.3	345.7	310.1	274.0	257.1	255.9	248.3	248.3	248.3
74°	821.9	581.2	381.8	309.5	280.4	247.2	232.6	227.3	220.3	220.9	220.3
75°	661.0	499.6	350.3	285.6	259.4	231.4	216.8	209.8	204.6	204.6	204.0
77.5°	417.4	379.5	282.1	227.3	207.5	190.6	180.7	171.4	171.4	170.8	170.2
80°	315.4	301.9	219.8	172.0	159.1	146.3	139.9	135.8	135.8	137.6	137.0
82.5°	216.3	227.3	154.5	120.1	113.7	104.3	103.2	103.8	102.0	99.7	99.1
85°	158.0	170.8	104.3	75.8	69.4	63.5	68.2	70.5	67.6	62.4	60.0
87.5°	60.6	111.9	56.0	31.5	29.1	25.1	29.1	30.3	32.6	25.6	26.2
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)