

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: P454057

Luminaire Tested: **GALN-SA5A-827-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454057
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-827-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13848 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

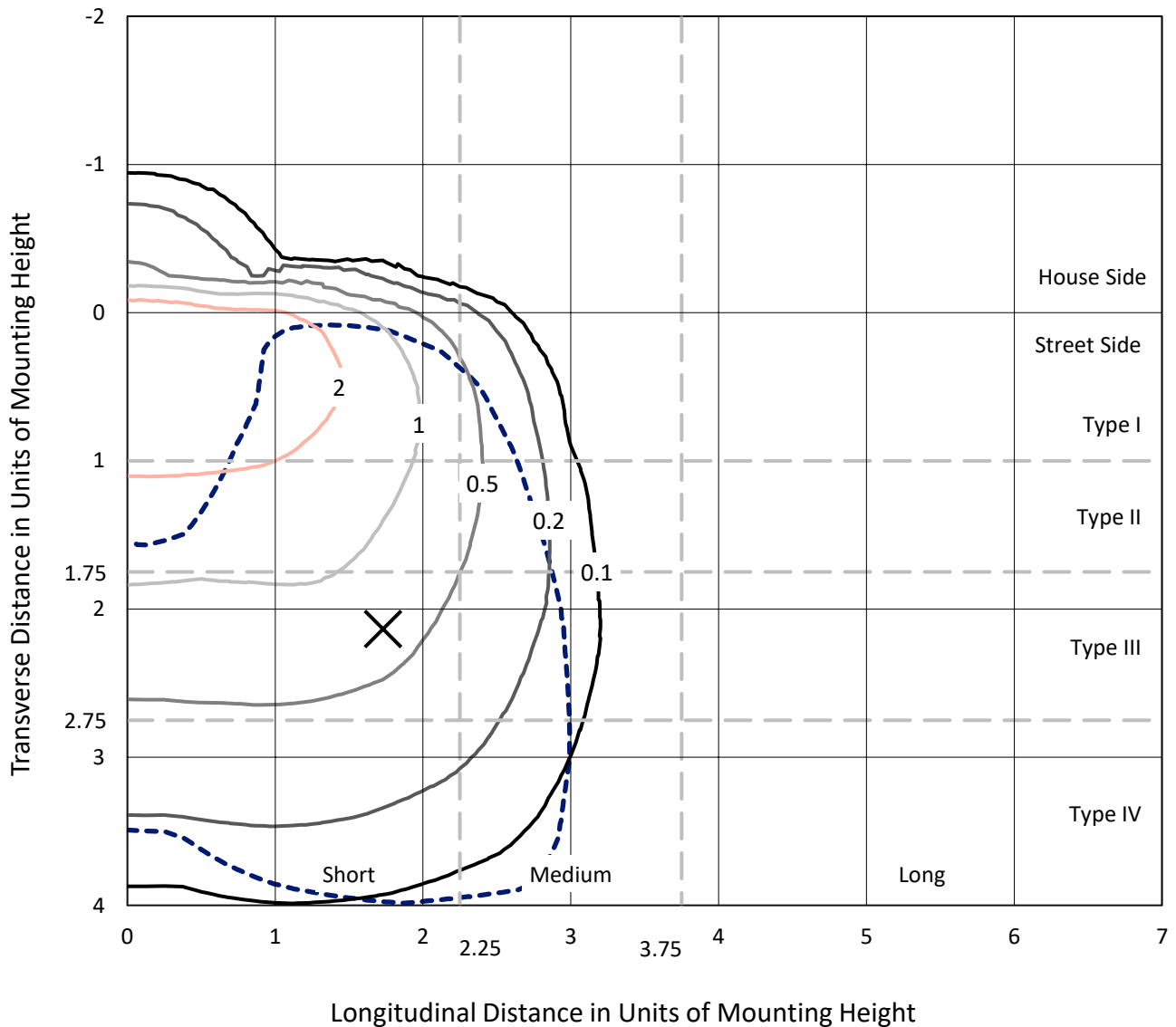
Input Watts (W): 154
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

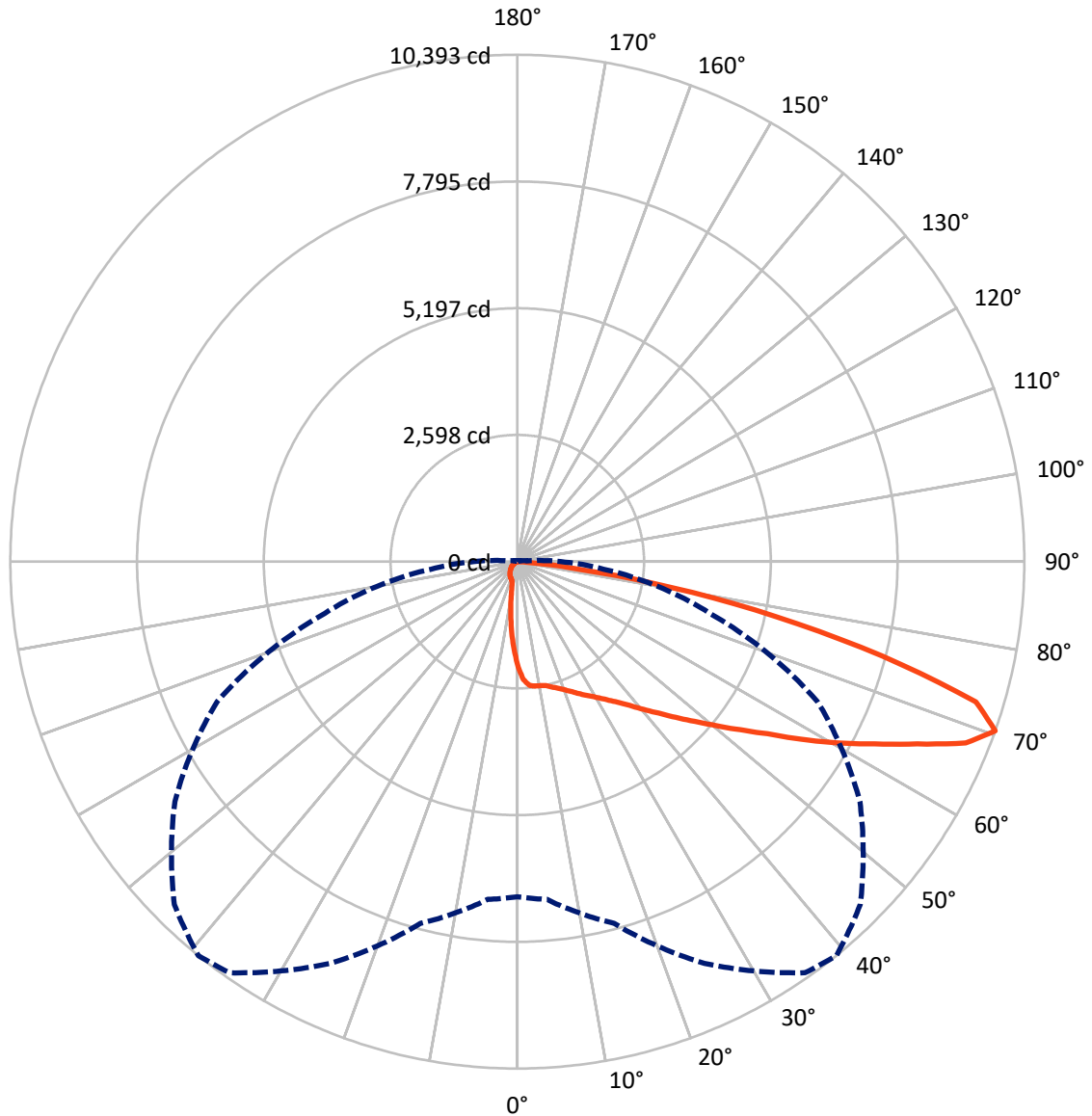
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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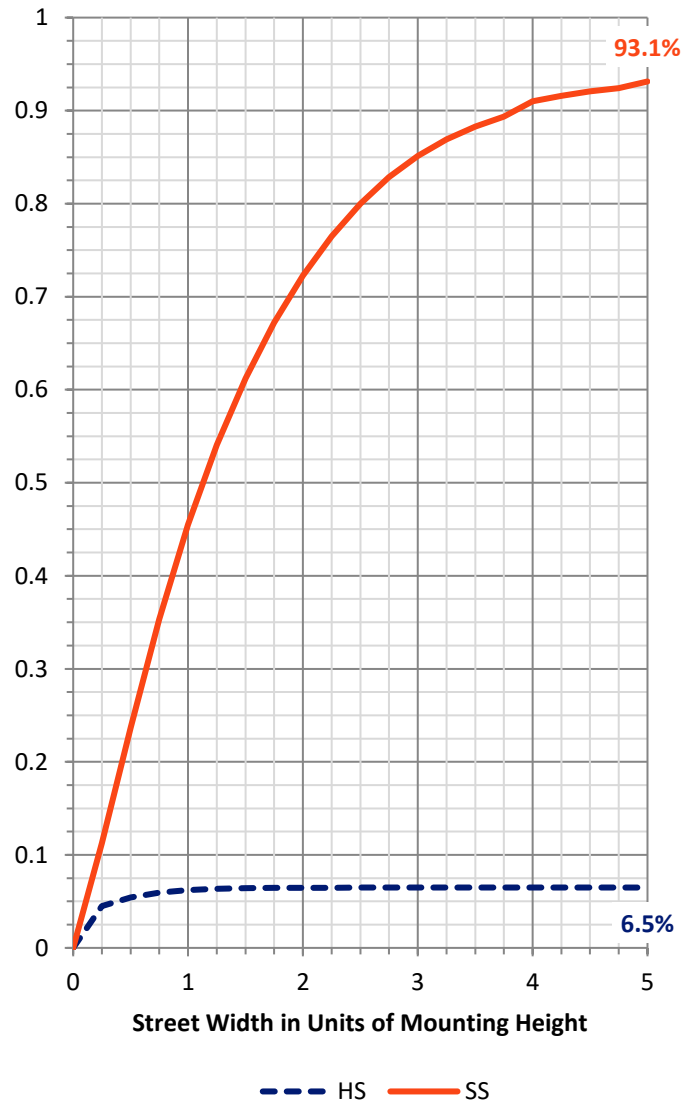
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	903.0	0.0	903.0
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	12945.1	0.0	12945.1
	% Fixture	93.5	0.0	93.5
Total	Lumens	13848.0	0.0	13848.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.3	1.3
10°-20°	478.9	3.5
20°-30°	802.4	5.8
30°-40°	1244.4	9.0
40°-50°	1971.9	14.2
50°-60°	2890.5	20.9
60°-70°	3705.0	26.8
70°-80°	2328.1	16.8
80°-90°	242.5	1.8
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°	13848.0	100.0
0°-180°	13848.0	100.0



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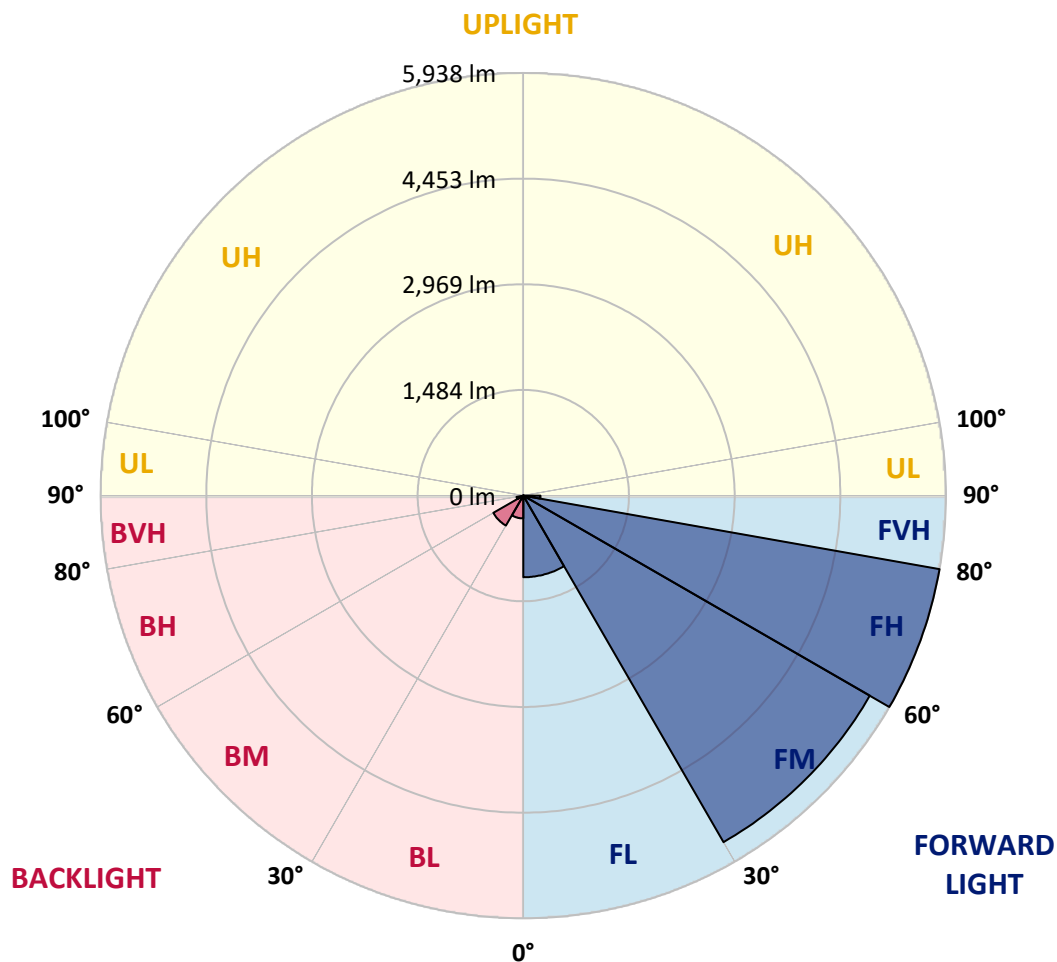
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1145.9	8.3			
FM (30°-60°)	5620.9	40.6			
FH (60°-80°)	5937.6	42.9			G3/7500
FVH (80°-90°)	240.8	1.7			G3/500
BL (0°-30°)	319.7	2.3	B1/500		
BM (30°-60°)	485.9	3.5	B1/1000		
BH (60°-80°)	95.5	0.7	B0/110		G0/110
BVH (80°-90°)	1.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8
2.5°	2496.7	2488.3	2477.2	2464.1	2426.9	2420.4	2398.1	2350.6	2293.8	2247.3	2183.1
5°	2614.9	2619.5	2611.2	2587.9	2560.9	2545.1	2517.2	2443.7	2370.1	2276.2	2171.0
7.5°	2641.9	2651.2	2640.9	2618.6	2592.5	2575.8	2553.5	2490.2	2404.6	2297.6	2153.3
10°	2639.1	2650.2	2643.7	2623.3	2601.8	2586.0	2561.8	2511.6	2442.7	2330.1	2158.9
12.5°	2634.4	2649.3	2648.4	2638.1	2620.5	2608.4	2593.5	2548.8	2484.6	2377.6	2189.6
15°	2621.4	2640.0	2656.8	2665.1	2666.1	2666.1	2647.4	2600.0	2538.6	2439.9	2229.6
17.5°	2627.0	2648.4	2690.3	2714.4	2731.2	2729.3	2709.8	2658.6	2590.7	2504.1	2271.5
20°	2661.4	2690.3	2748.9	2797.3	2814.0	2808.4	2782.4	2722.8	2645.6	2559.0	2312.4
22.5°	2746.1	2772.1	2845.7	2902.4	2914.5	2899.6	2862.4	2781.4	2711.7	2618.6	2361.8
25°	2872.6	2903.4	2971.3	3014.1	3014.1	3005.7	2953.6	2858.7	2786.1	2701.4	2426.0
27.5°	3026.2	3052.2	3119.2	3157.4	3135.1	3110.9	3058.8	2944.3	2874.5	2805.6	2503.2
30°	3181.6	3198.3	3269.1	3285.8	3262.5	3231.8	3176.0	3061.5	3000.1	2947.1	2614.9
32.5°	3328.6	3364.9	3423.5	3419.8	3388.2	3373.3	3322.1	3200.2	3165.8	3160.2	2771.2
35°	3475.6	3503.6	3555.7	3568.7	3540.8	3538.0	3500.8	3410.5	3411.4	3447.7	3015.0
37.5°	3602.2	3627.3	3688.7	3717.6	3723.2	3737.1	3722.2	3662.7	3747.4	3846.9	3337.9
40°	3708.3	3743.6	3821.8	3872.1	3929.8	3980.9	3983.7	3996.8	4167.1	4338.3	3759.5
42.5°	3791.1	3840.4	3954.0	4047.0	4179.2	4244.3	4296.4	4368.1	4654.7	4910.6	4256.4
45°	3899.1	3955.8	4097.3	4243.4	4449.9	4557.0	4629.5	4821.2	5227.9	5576.9	4766.3
47.5°	4077.7	4107.5	4251.7	4464.8	4736.6	4889.2	5030.6	5320.9	5843.0	6155.7	5190.7
50°	4307.6	4327.1	4436.0	4731.9	5083.7	5284.7	5542.4	5883.9	6481.4	6635.8	5430.8
52.5°	4561.6	4568.1	4650.0	5026.0	5472.6	5725.7	6014.2	6435.8	7001.5	6978.3	5589.9
55°	4856.6	4847.3	4917.1	5345.1	5933.3	6222.7	6558.6	7000.6	7452.9	7221.2	5681.1
57.5°	5194.4	5169.3	5237.2	5768.5	6523.2	6869.4	7210.9	7488.2	7802.8	7424.9	5724.8
60°	5548.0	5497.8	5578.7	6244.1	7218.4	7546.9	7830.7	7905.1	8171.3	7586.9	5649.4
62.5°	5830.0	5830.9	5981.6	6750.3	7933.0	8220.6	8371.3	8438.3	8488.6	7551.5	5253.0
65°	6270.1	6285.0	6526.0	7452.9	8760.3	9009.7	9113.0	8895.2	8502.5	7112.3	4657.5
67.5°	6724.2	6771.7	7212.8	8420.6	9716.0	9917.0	9783.9	8983.6	8122.9	6110.1	3531.5
70°	6872.2	6950.4	7677.1	9086.9	10289.2	10393.4	9943.0	8571.4	6790.3	4085.2	1777.4
72.5°	6297.1	6423.7	7410.1	8844.1	9923.5	9833.2	8896.2	7188.6	4316.9	1551.2	542.5
75°	4440.6	4496.5	6158.5	7336.5	7981.4	7725.5	6767.0	4634.2	1775.5	435.5	186.1
77.5°	2292.9	2265.9	3662.7	4867.8	5692.2	5427.0	4431.3	2399.0	672.8	181.5	115.4
80°	1185.5	1205.1	1584.7	2550.7	3474.7	3197.4	2362.7	1112.0	358.3	100.5	88.4
82.5°	664.4	623.5	911.0	1113.9	1624.8	1273.9	906.4	787.3	156.3	60.5	83.8
85°	121.0	126.6	499.7	602.1	563.9	358.3	292.2	525.8	45.6	33.5	58.6
87.5°	1.9	1.9	96.8	173.1	109.8	50.3	92.1	75.4	9.3	13.0	10.2
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°	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8	2160.8
2.5°	2150.5	2115.2	2049.1	1984.0	1901.1	1833.2	1787.6	1740.1	1691.8	1695.5	1706.6
5°	2113.3	2051.9	1921.6	1783.9	1651.7	1532.6	1415.4	1310.2	1267.4	1228.3	1230.2
7.5°	2076.1	1989.5	1798.8	1582.9	1382.8	1180.0	1032.9	911.9	847.7	799.4	785.4
10°	2059.3	1944.9	1686.2	1389.3	1105.5	884.0	695.1	596.5	520.2	496.0	502.5
12.5°	2066.8	1922.5	1584.7	1214.4	876.6	616.0	483.9	433.6	416.9	414.1	412.2
15°	2080.7	1906.7	1485.2	1020.8	643.9	457.8	406.7	397.3	395.5	393.6	394.6
17.5°	2099.3	1892.8	1379.1	839.4	494.1	400.1	385.3	380.6	379.7	379.7	379.7
20°	2118.0	1876.9	1260.9	677.4	412.2	377.8	368.5	365.7	364.8	364.8	363.8
22.5°	2139.4	1863.0	1140.9	532.3	379.7	362.0	353.6	351.8	350.8	349.9	349.9
25°	2170.1	1845.3	1013.4	435.5	359.2	347.1	338.7	336.9	335.9	332.2	333.1
27.5°	2211.0	1832.3	882.2	375.9	340.6	328.5	322.9	320.1	318.3	315.5	316.4
30°	2266.8	1821.1	742.6	343.4	319.2	308.9	303.4	301.5	299.6	296.8	296.8
32.5°	2363.6	1825.8	595.6	317.3	299.6	287.5	282.0	280.1	278.2	275.4	275.4
35°	2508.8	1852.7	476.4	295.0	276.4	264.3	258.7	258.7	255.9	252.2	251.3
37.5°	2746.1	1921.6	382.5	273.6	254.0	242.9	236.4	234.5	231.7	226.1	225.2
40°	3026.2	2028.6	322.0	252.2	233.6	222.4	216.8	211.2	203.8	198.2	197.3
42.5°	3377.9	2138.4	279.2	230.8	214.0	203.8	197.3	188.0	176.8	169.4	168.4
45°	3744.6	2238.9	250.3	211.2	195.4	187.0	179.6	164.7	150.8	141.4	140.5
47.5°	4018.2	2257.5	227.1	192.6	179.6	171.2	161.0	142.4	123.8	115.4	112.6
50°	4147.5	2167.3	202.9	174.0	163.8	154.5	141.4	120.0	99.6	89.3	87.5
52.5°	4193.1	2010.9	183.3	157.3	148.0	136.8	121.0	96.8	78.2	67.9	67.0
55°	4174.5	1813.7	165.6	141.4	129.3	116.3	100.5	77.2	57.7	49.3	47.5
57.5°	4076.8	1562.4	148.0	125.6	110.7	97.7	80.0	57.7	39.1	31.6	30.7
60°	3813.4	1220.0	130.3	107.9	94.0	80.0	63.3	40.9	24.2	17.7	17.7
62.5°	3368.6	905.4	113.5	90.3	79.1	64.2	44.7	26.1	13.0	9.3	8.4
65°	2814.9	668.1	94.9	76.3	66.1	50.3	31.6	15.8	6.5	2.8	1.9
67.5°	1964.4	412.2	79.1	62.3	54.0	36.3	19.5	6.5	2.8	0.0	0.0
70°	892.4	196.3	60.5	47.5	40.9	26.1	10.2	3.7	1.9	0.0	0.0
72.5°	277.3	103.3	42.8	34.4	27.9	16.8	5.6	2.8	1.9	0.0	0.0
75°	128.4	66.1	27.0	18.6	15.8	8.4	3.7	1.9	0.9	0.0	0.0
77.5°	95.8	51.2	15.8	10.2	8.4	5.6	2.8	1.9	0.9	0.0	0.0
80°	83.8	26.1	9.3	6.5	4.7	3.7	1.9	0.9	0.0	0.0	0.0
82.5°	75.4	13.0	5.6	3.7	2.8	1.9	0.9	0.9	0.0	0.0	0.0
85°	40.9	7.4	3.7	2.8	1.9	0.9	0.9	0.0	0.0	0.0	0.0
87.5°	7.4	3.7	2.8	1.9	1.9	0.9	0.9	0.9	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)