

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: P454069

Luminaire Tested: **GALN-SA5A-827-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454069
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
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-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16695 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

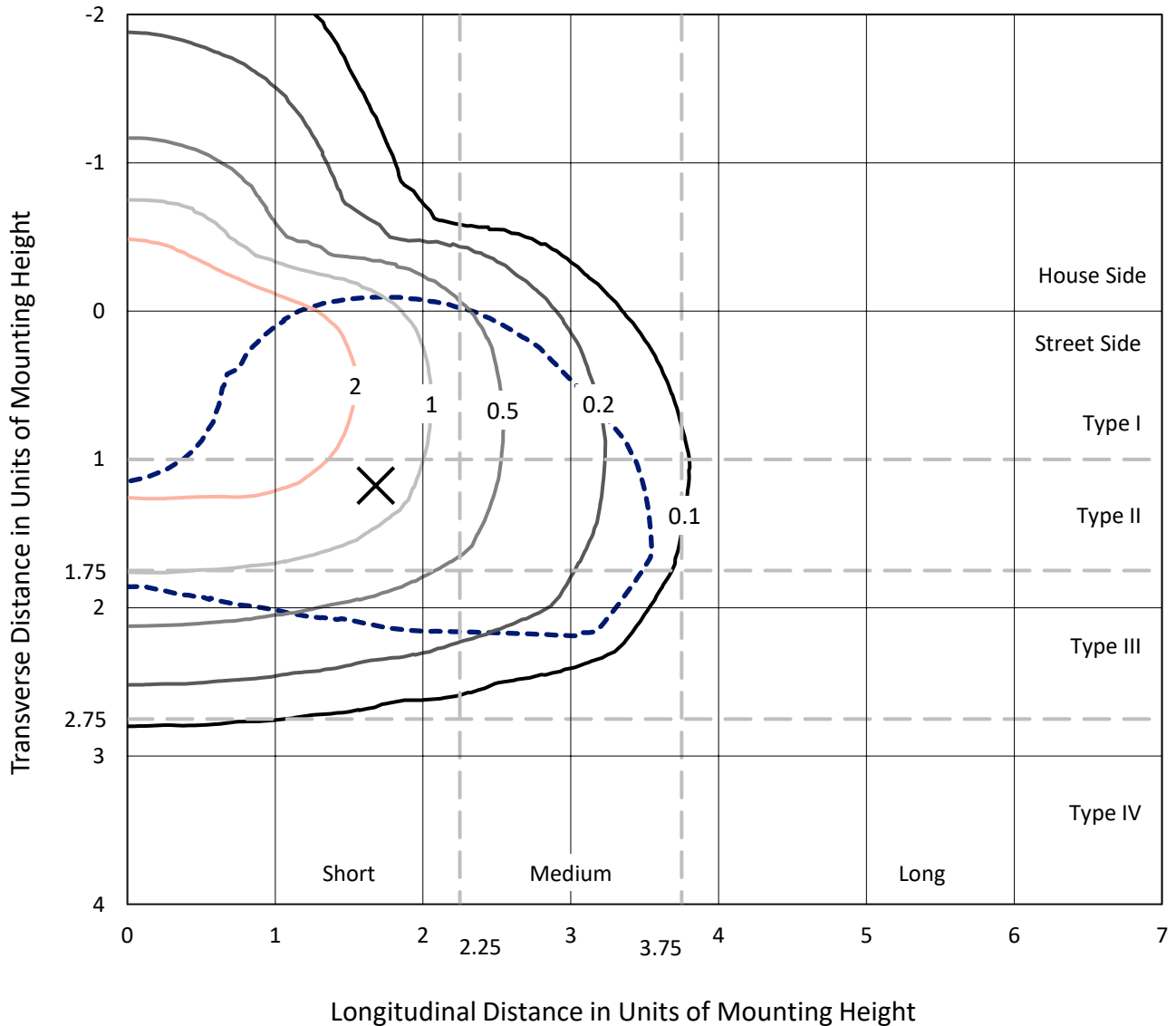
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

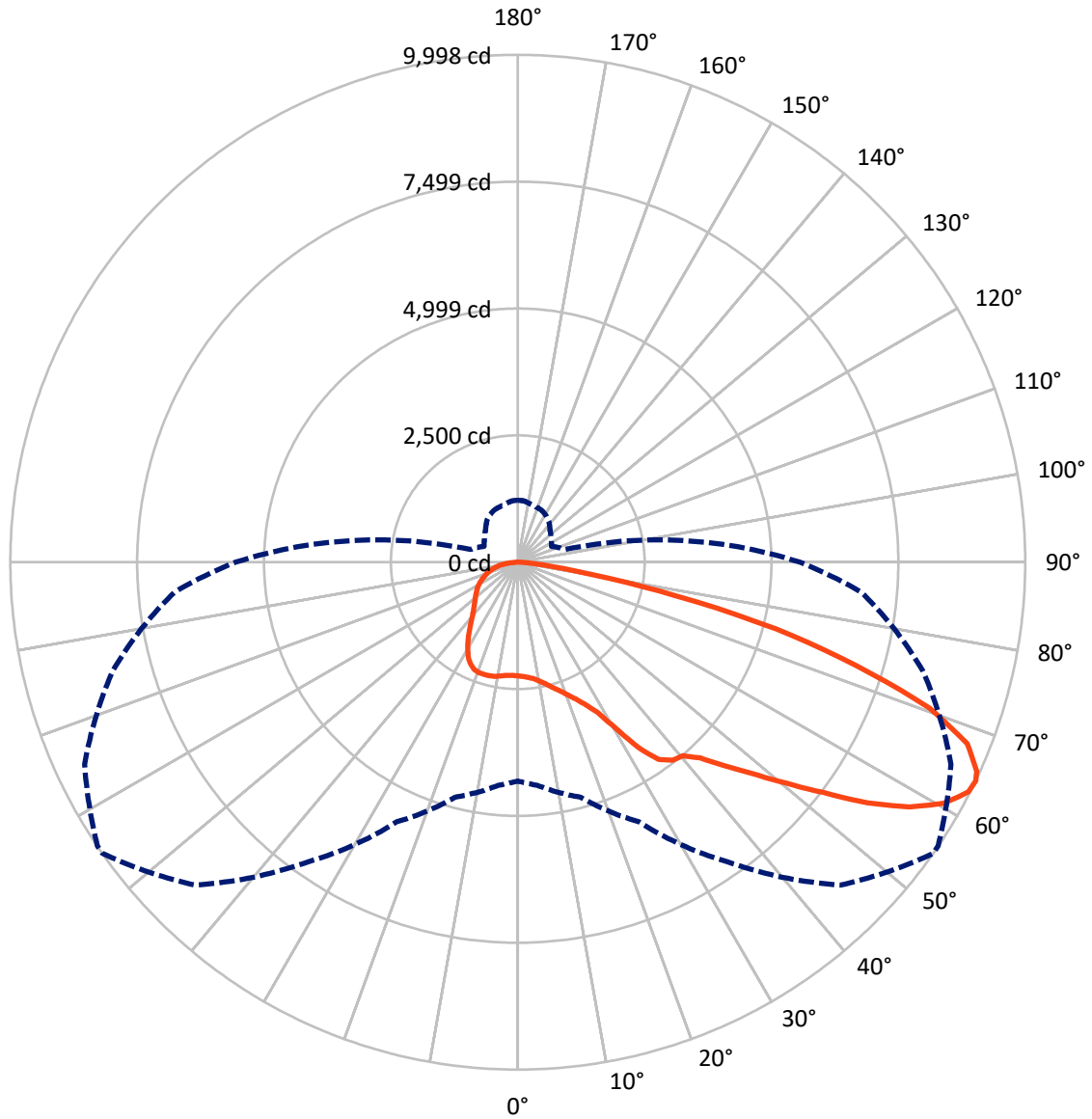
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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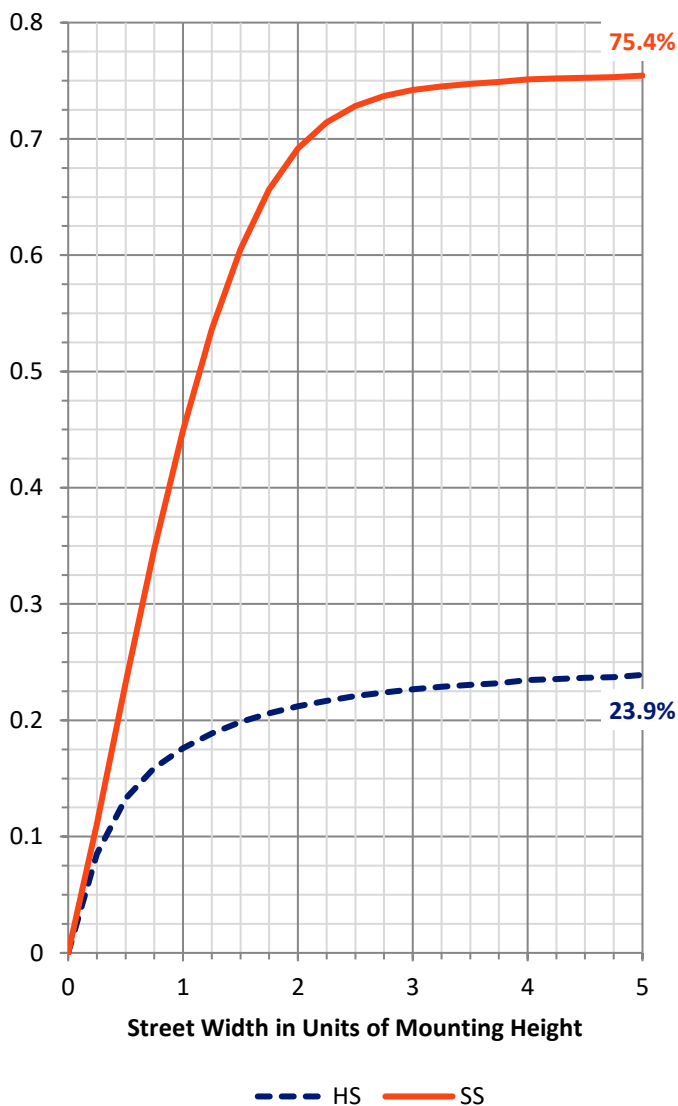
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4055.5	0.0	4055.5
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	12639.5	0.0	12639.5
	% Fixture	75.7	0.0	75.7
Total	Lumens	16695.0	0.0	16695.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.9	1.3
10°-20°	687.5	4.1
20°-30°	1223.9	7.3
30°-40°	1883.2	11.3
40°-50°	2669.5	16.0
50°-60°	3864.1	23.1
60°-70°	3998.9	24.0
70°-80°	1872.7	11.2
80°-90°	277.2	1.7
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°	16695.0	100.0
0°-180°	16695.0	100.0

Coefficient of Utilization



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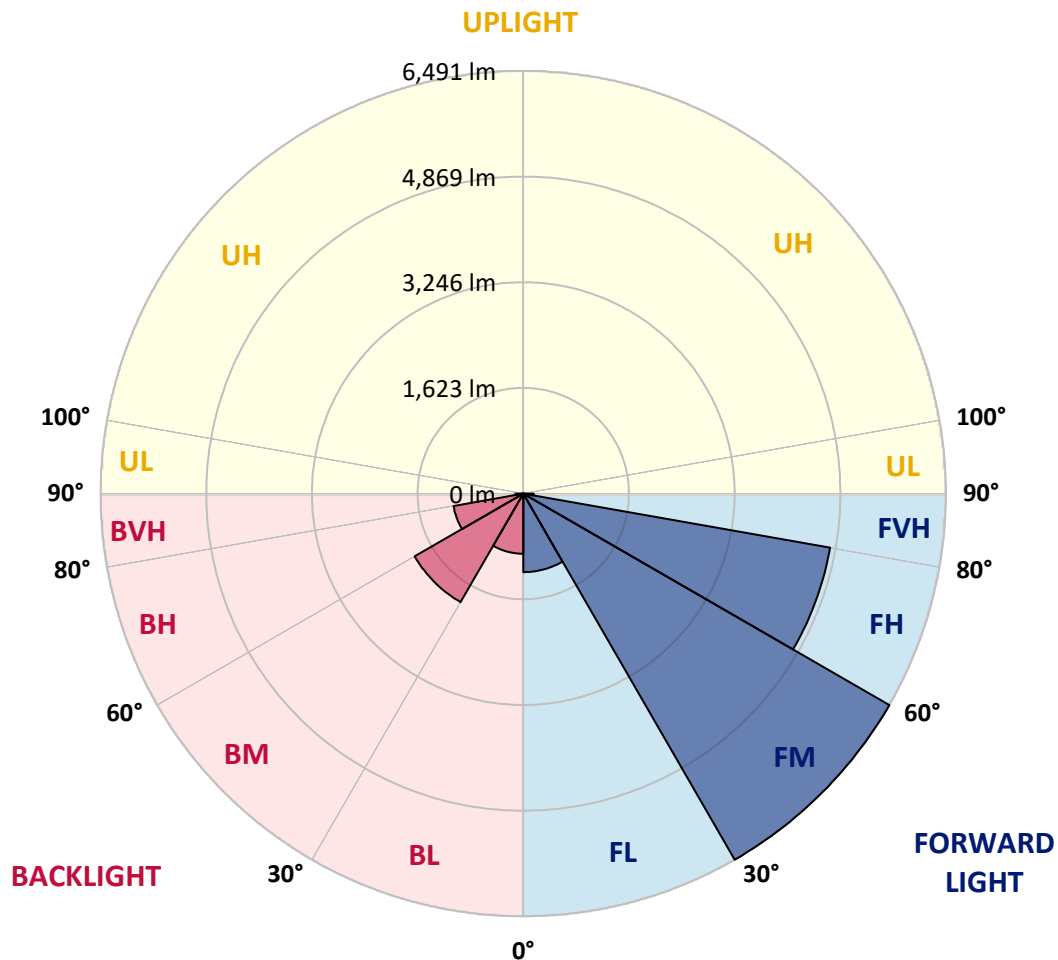
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1205.6	7.2			
FM	(30°-60°)	6491.5	38.9			
FH	(60°-80°)	4783.6	28.7			G2/5000
FVH	(80°-90°)	158.7	1.0			G2/225
BL	(0°-30°)	923.7	5.5	B2/1000		
BM	(30°-60°)	1925.3	11.5	B2/2500		
BH	(60°-80°)	1088.0	6.5	B3/2500		G3/2500
BVH	(80°-90°)	118.5	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0
2.5°	2265.1	2264.2	2267.0	2264.2	2266.0	2259.5	2256.7	2258.6	2255.8	2251.1	2242.8
5°	2293.0	2292.1	2293.0	2289.3	2291.1	2287.4	2280.9	2282.8	2278.1	2267.9	2255.8
7.5°	2340.5	2336.7	2336.7	2335.8	2332.1	2326.5	2321.9	2320.0	2315.3	2302.3	2283.7
10°	2401.9	2401.9	2402.8	2395.4	2400.0	2389.8	2385.1	2384.2	2368.4	2351.6	2325.6
12.5°	2482.9	2487.5	2484.7	2481.0	2479.1	2475.4	2459.6	2463.3	2445.6	2416.8	2385.1
15°	2583.4	2590.8	2586.1	2584.3	2579.6	2565.7	2559.2	2556.4	2533.1	2491.2	2449.4
17.5°	2716.4	2707.1	2703.4	2698.8	2679.2	2669.0	2657.8	2655.9	2635.5	2586.1	2521.0
20°	2832.8	2845.8	2838.3	2833.7	2814.1	2794.6	2786.2	2783.4	2765.8	2711.8	2607.6
22.5°	2971.4	2974.2	2977.0	2965.8	2956.5	2941.6	2926.8	2922.1	2915.6	2859.7	2732.3
25°	3119.4	3130.6	3121.2	3110.1	3098.9	3098.0	3111.9	3110.1	3107.3	3053.3	2897.9
27.5°	3360.4	3370.6	3373.4	3361.3	3318.5	3322.3	3353.9	3364.1	3406.9	3317.6	3111.0
30°	3496.3	3506.5	3529.8	3575.4	3643.3	3702.9	3779.2	3802.5	3843.4	3675.0	3364.1
32.5°	3580.0	3583.8	3625.6	3710.3	3914.1	4136.5	4344.1	4352.4	4378.5	4142.1	3595.9
35°	3712.2	3715.0	3748.5	3841.5	4080.7	4451.1	4772.1	4782.4	4761.0	4287.3	3703.8
37.5°	3875.0	3882.5	3903.9	3981.1	4266.8	4714.4	4949.9	4942.4	4752.6	4402.7	3894.6
40°	4112.3	4112.3	4087.2	4191.4	4463.2	4865.2	5012.2	4999.2	4949.0	4736.8	4184.9
42.5°	4321.7	4318.0	4377.6	4448.3	4708.9	5097.9	5273.7	5295.1	5378.0	5156.5	4515.3
45°	4594.4	4611.1	4644.6	4773.1	5126.7	5495.2	5722.3	5742.8	5860.0	5650.6	4901.5
47.5°	4869.9	4875.4	4980.6	5151.8	5644.1	6034.0	6220.2	6253.7	6360.7	6228.5	5317.5
50°	5065.3	5118.3	5286.8	5556.6	6177.4	6691.0	6836.2	6876.2	7065.1	6857.6	5802.3
52.5°	5271.9	5324.0	5529.7	5941.0	6789.7	7362.9	7541.6	7568.6	7765.0	7494.2	6298.3
55°	5448.7	5497.1	5730.7	6281.6	7277.3	8048.8	8372.6	8341.0	8435.0	7984.6	6680.8
57.5°	5477.5	5516.6	5810.7	6499.3	7644.0	8636.9	9101.3	9119.9	9011.0	8351.2	6996.3
60°	5254.2	5334.2	5672.0	6476.1	7808.7	9046.4	9644.8	9657.8	9348.9	8539.2	7121.9
62.5°	4858.7	4850.3	5258.8	6102.0	7577.9	9139.5	9964.9	9951.0	9481.0	8449.0	7000.0
64°	4312.4	4412.9	4794.5	5642.3	7205.7	8996.2	9998.4	9991.0	9417.7	8261.0	6792.5
65°	3979.3	3973.7	4350.6	5266.3	6835.3	8780.3	9938.9	9928.6	9285.6	8092.5	6631.5
67.5°	2872.8	2885.8	3258.0	4063.9	5556.6	7936.2	9550.8	9512.6	8764.4	7534.2	6019.2
70°	1740.2	1747.7	2039.9	2696.0	3988.6	6415.6	8609.0	8610.9	7966.9	6700.4	5123.0
72.5°	916.6	936.2	1053.4	1530.8	2422.4	4501.3	6984.2	7149.8	6839.9	5718.6	4047.2
75°	510.0	512.8	595.6	754.7	1235.8	2519.1	5249.5	5297.0	5415.2	4602.8	2992.8
77.5°	389.0	394.6	420.6	487.6	672.8	1167.9	3177.1	3415.3	3816.4	3245.0	1707.7
80°	315.5	321.1	343.4	383.4	447.6	553.7	1475.9	1604.4	2042.7	1440.6	666.3
82.5°	245.7	242.0	270.8	296.9	325.7	327.6	605.8	670.0	832.0	619.8	288.5
85°	182.4	182.4	205.7	200.1	210.3	191.7	267.1	295.0	333.2	263.4	134.0
87.5°	72.6	80.0	134.9	121.0	94.0	75.4	98.6	104.2	115.4	103.3	55.8
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°	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0	2240.0
2.5°	2243.7	2246.5	2240.0	2235.3	2233.5	2230.7	2227.9	2228.8	2232.5	2236.2	2235.3
5°	2254.9	2255.8	2244.6	2239.0	2235.3	2231.6	2231.6	2234.4	2241.8	2247.4	2247.4
7.5°	2282.8	2282.8	2267.0	2256.7	2251.1	2244.6	2242.8	2243.7	2249.3	2256.7	2257.6
10°	2326.5	2322.8	2302.3	2286.5	2276.3	2260.4	2246.5	2239.0	2241.8	2246.5	2246.5
12.5°	2379.6	2369.3	2343.3	2321.9	2296.7	2267.0	2238.1	2223.2	2222.3	2226.9	2225.1
15°	2436.3	2425.2	2388.9	2349.8	2306.0	2262.3	2227.9	2206.5	2189.7	2185.1	2195.3
17.5°	2502.4	2479.1	2428.9	2374.9	2309.8	2253.0	2199.0	2155.3	2125.5	2117.1	2119.9
20°	2582.4	2551.7	2483.8	2399.1	2307.0	2219.5	2135.7	2077.1	2028.7	2013.8	2015.7
22.5°	2693.2	2640.1	2540.6	2411.2	2283.7	2156.2	2039.9	1963.6	1904.9	1881.7	1895.6
25°	2818.8	2761.1	2594.5	2408.4	2223.2	2054.8	1926.4	1826.8	1773.7	1739.3	1746.7
27.5°	2991.9	2889.5	2652.2	2383.3	2136.7	1931.0	1782.1	1688.1	1639.7	1622.0	1630.4
30°	3213.4	3056.1	2714.6	2315.3	1999.9	1774.7	1636.9	1575.5	1546.7	1524.3	1531.8
32.5°	3373.4	3173.4	2728.5	2200.9	1851.9	1632.3	1538.3	1492.7	1461.0	1439.6	1444.3
35°	3487.9	3272.9	2722.0	2060.4	1697.4	1515.0	1460.1	1422.9	1371.7	1325.2	1316.8
37.5°	3641.5	3397.6	2674.6	1906.8	1544.8	1435.9	1396.8	1328.0	1254.5	1192.1	1189.3
40°	3876.9	3543.7	2573.1	1726.3	1414.5	1377.3	1329.8	1240.5	1161.4	1111.1	1107.4
42.5°	4119.8	3678.7	2435.4	1536.4	1307.5	1315.9	1258.2	1169.8	1121.4	1088.8	1085.1
45°	4416.6	3824.8	2286.5	1371.7	1228.4	1258.2	1195.8	1144.6	1115.8	1094.4	1088.8
47.5°	4737.7	3974.6	2119.0	1223.7	1161.4	1205.1	1169.8	1146.5	1130.7	1115.8	1109.3
50°	5083.9	4142.1	1961.7	1104.6	1100.9	1150.2	1167.0	1158.6	1149.3	1144.6	1139.1
52.5°	5463.6	4313.4	1829.6	1020.9	1047.9	1111.1	1167.9	1174.4	1174.4	1171.6	1167.9
55°	5720.4	4432.5	1695.6	952.9	993.9	1079.5	1166.0	1191.2	1200.5	1196.8	1193.0
57.5°	5910.3	4497.6	1527.1	894.3	948.3	1048.8	1155.8	1193.0	1202.3	1207.0	1205.1
60°	5949.4	4437.1	1306.6	832.9	899.0	1004.1	1118.6	1165.1	1177.2	1206.1	1208.9
62.5°	5773.5	4251.0	1086.9	772.4	838.5	936.2	1068.3	1133.5	1157.7	1202.3	1207.0
64°	5557.6	4042.5	965.0	734.2	799.4	898.0	1043.2	1125.1	1156.7	1216.3	1220.0
65°	5399.4	3890.9	888.7	710.1	774.3	872.9	1029.2	1127.9	1165.1	1237.7	1243.3
67.5°	4816.8	3368.8	735.2	653.3	714.7	830.1	1032.0	1151.2	1163.3	1246.1	1245.1
70°	3985.8	2682.0	616.1	601.2	657.0	795.7	1020.9	1113.9	1114.9	1169.8	1156.7
72.5°	2984.4	1982.2	534.2	547.2	592.8	713.8	964.1	1063.7	1047.9	1055.3	1042.3
75°	2050.1	1311.2	459.7	489.5	525.8	630.9	884.1	966.0	940.8	931.5	922.2
77.5°	1094.4	724.9	382.5	432.7	456.9	545.3	771.5	850.6	824.5	788.2	776.1
80°	443.0	341.5	308.0	358.3	372.2	439.2	642.1	691.4	671.9	608.6	588.1
82.5°	222.4	204.7	242.0	282.0	282.9	313.6	477.4	523.9	480.2	403.0	385.3
85°	116.3	120.0	166.6	198.2	175.0	169.4	286.6	317.3	291.3	253.1	228.0
87.5°	41.9	48.4	87.5	86.5	61.4	32.6	63.3	30.7	16.8	10.2	13.0
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)