

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: P454792

Luminaire Tested: **GALN-SA5D-830-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454792
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-830-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31374 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 309
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

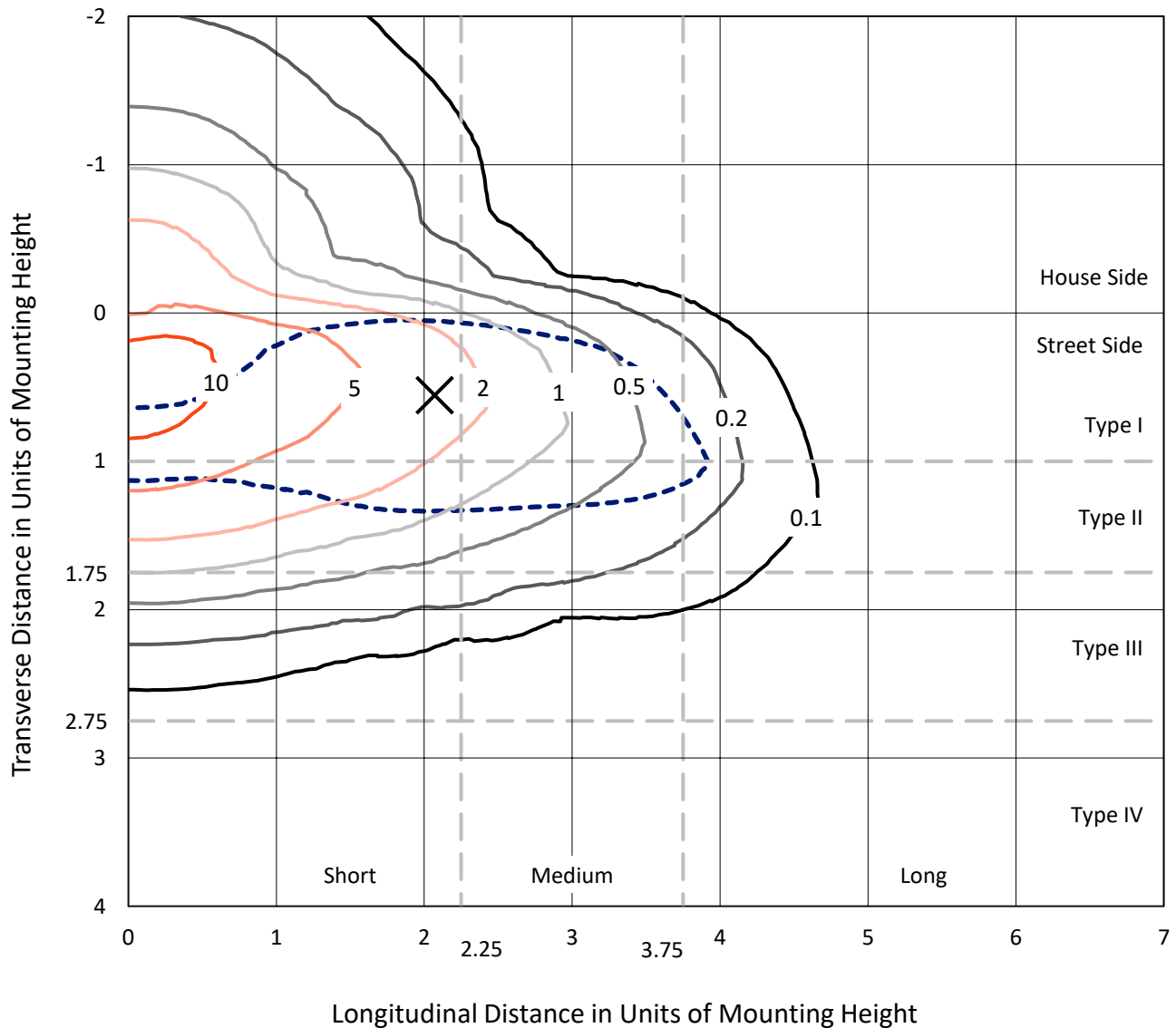


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

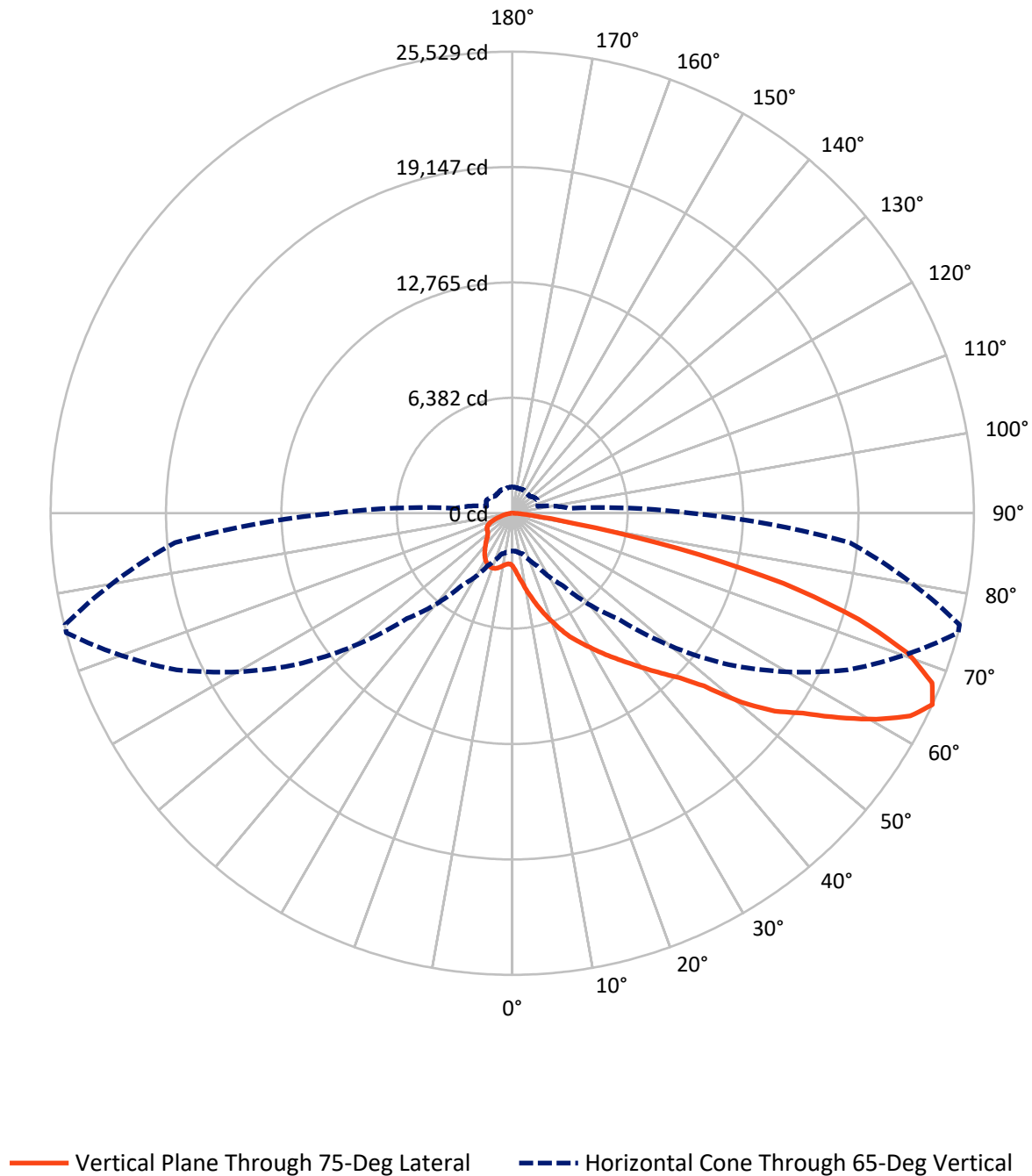


Based on 25 foot mounting height. Maximum calculated value = 12.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5274.4	0.0	5274.4
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	26099.6	0.0	26099.6
	% Fixture	83.2	0.0	83.2
Total	Lumens	31374.0	0.0	31374.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.2	1.1
10°-20°	1387.2	4.4
20°-30°	2679.7	8.5
30°-40°	4352.6	13.9
40°-50°	5987.4	19.1
50°-60°	7069.0	22.5
60°-70°	6193.6	19.7
70°-80°	2956.9	9.4
80°-90°	393.5	1.3
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°	31374.0	100.0
0°-180°	31374.0	100.0

Coefficient of Utilization



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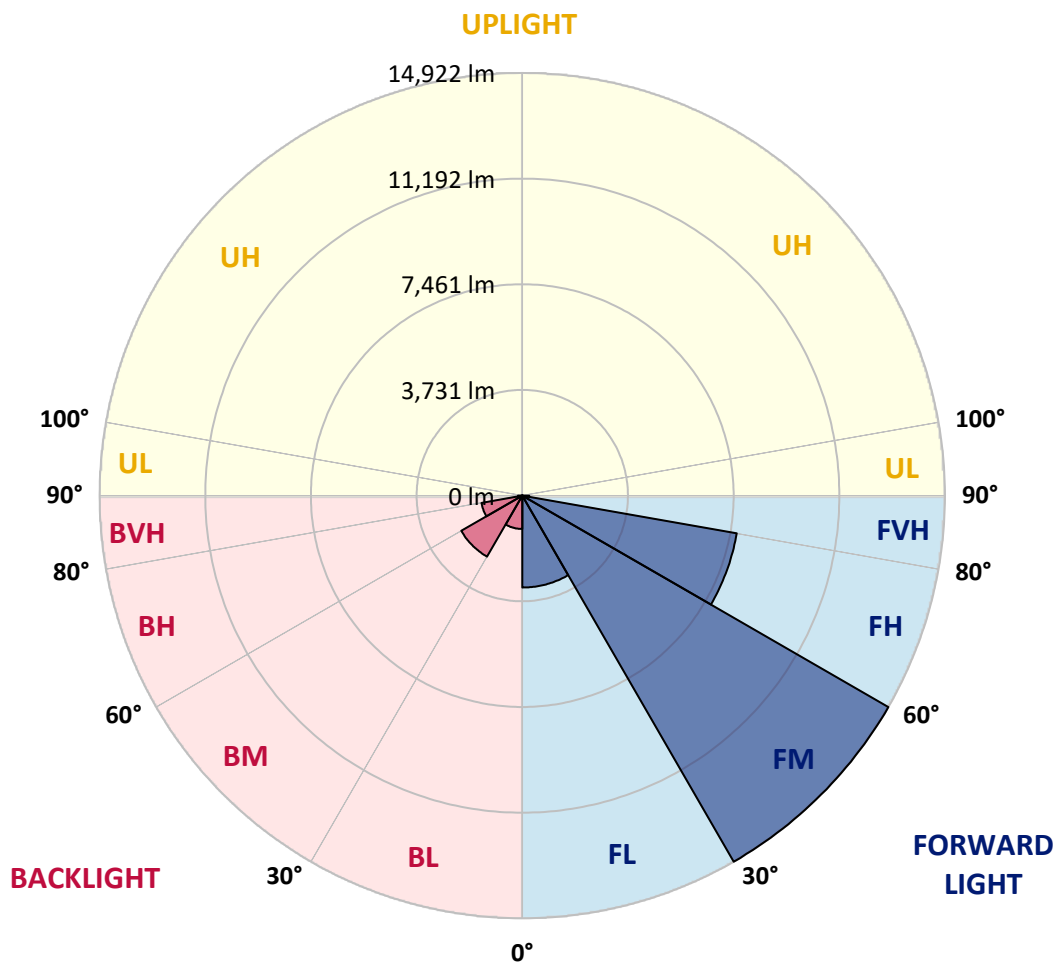
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3243.6	10.3			
FM	(30°-60°)	14922.1	47.6			
FH	(60°-80°)	7688.0	24.5			G4/12000
FVH	(80°-90°)	245.9	0.8			G3/500
BL	(0°-30°)	1177.5	3.8	B3/2500		
BM	(30°-60°)	2486.8	7.9	B2/2500		
BH	(60°-80°)	1462.5	4.7	B3/2500		G3/2500
BVH	(80°-90°)	147.6	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0
2.5°	3873.1	3847.6	3820.4	3745.5	3665.5	3575.3	3446.0	3321.8	3156.7	3151.6	3029.1
5°	4946.9	4929.9	4809.1	4739.3	4553.8	4307.0	4097.7	3772.7	3471.5	3435.8	3197.5
7.5°	5933.9	5867.5	5821.6	5695.6	5511.9	5195.3	4790.3	4351.3	3847.6	3799.9	3405.1
10°	6677.5	6670.7	6646.9	6538.0	6400.2	6085.3	5636.1	5006.5	4324.1	4230.5	3657.0
12.5°	7234.0	7239.1	7235.7	7234.0	7135.3	6868.1	6381.4	5717.8	4805.6	4739.3	3948.0
15°	7599.9	7650.9	7671.3	7756.4	7764.9	7586.3	7167.6	6405.3	5348.5	5249.8	4261.1
17.5°	7841.5	7867.0	7962.3	8107.0	8224.4	8192.1	7819.4	7041.7	5903.3	5738.2	4586.1
20°	8072.9	8117.2	8190.4	8387.8	8595.4	8690.7	8428.6	7693.5	6452.9	6347.4	4945.2
22.5°	8554.5	8617.5	8643.0	8743.4	8920.4	9088.9	8969.7	8318.0	7055.3	6912.4	5326.4
25°	9369.7	9436.0	9364.5	9340.7	9398.6	9482.0	9456.4	8906.8	7623.7	7419.5	5687.1
27.5°	10431.5	10440.0	10300.5	10167.8	10024.8	9982.3	9904.0	9429.2	8117.2	7947.0	6049.6
30°	11571.7	11530.8	11299.4	11059.5	10817.8	10579.6	10354.9	9932.9	8666.8	8471.1	6405.3
32.5°	12630.1	12608.0	12351.1	11978.4	11570.0	11345.3	10891.0	10441.7	9255.6	9066.7	6771.1
35°	13423.1	13455.5	13173.0	12766.3	12320.4	12121.3	11547.9	10976.1	9864.9	9658.9	7169.3
37.5°	13986.4	13969.4	13719.2	13367.0	12975.6	12802.0	12315.3	11559.8	10520.0	10322.6	7605.0
40°	14187.2	14177.0	13991.5	13734.6	13486.1	13424.8	13118.5	12189.4	11270.5	11039.0	8129.1
42.5°	14059.6	14081.7	13959.2	13889.4	13843.5	13887.7	13916.6	13014.7	12089.0	11876.3	8697.5
45°	13668.2	13656.3	13639.3	13753.3	14011.9	14302.9	14706.2	13794.1	12979.0	12808.8	9459.8
47.5°	12968.8	13053.9	13096.4	13411.2	13976.2	14665.4	15615.0	14839.0	14270.6	14122.5	10622.1
50°	11990.3	12058.4	12310.2	12870.1	13712.4	14801.5	16503.2	16547.5	16425.0	16147.6	11884.8
52.5°	10462.2	10567.7	11086.7	12112.8	13171.3	14745.4	17041.0	18012.7	18174.3	17966.7	13128.7
55°	8751.9	8900.0	9447.9	10794.0	12425.9	14439.1	17412.0	18861.8	19506.8	19314.5	14326.8
57.5°	7077.4	7234.0	7797.3	9100.8	11125.8	13761.8	17655.3	19808.0	21320.8	21070.7	15817.5
60°	5304.3	5467.6	5950.9	7293.6	9274.4	12437.8	17490.2	20628.2	23133.1	23025.9	17309.9
62.5°	3422.2	3602.5	4022.9	5134.1	7128.5	10628.9	16607.1	21080.9	24702.1	24572.8	18399.0
65°	2084.6	2105.0	2336.5	3187.3	4878.8	8229.5	14587.1	20480.2	25529.2	25490.0	18730.8
67.5°	1347.8	1380.1	1485.6	1909.3	2925.3	5716.1	11663.6	18497.7	25045.9	25032.3	18045.0
70°	1138.4	1148.7	1196.3	1288.2	1700.0	3466.4	8190.4	15337.6	23209.7	23209.7	16396.0
72.5°	1017.6	1031.2	1048.3	1077.2	1213.3	1963.8	4887.3	11939.2	20039.4	20172.2	13955.8
75°	924.0	920.6	930.8	935.9	1034.6	1283.1	2527.0	8830.2	15502.6	15237.2	10106.5
77.5°	791.3	796.4	791.3	813.4	913.8	976.8	1283.1	5925.4	9395.2	9051.4	5072.8
80°	650.1	658.6	667.1	680.7	781.1	741.9	770.9	2700.6	3474.9	3401.7	1567.3
82.5°	488.4	500.3	513.9	546.3	614.3	490.1	486.7	1153.8	1254.2	1148.7	576.9
85°	197.4	233.1	352.3	384.6	386.3	268.9	299.5	481.6	512.2	500.3	226.3
87.5°	45.9	54.5	114.0	171.9	158.3	100.4	110.6	156.6	178.7	165.1	76.6
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°	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0	2915.0
2.5°	2972.9	2913.3	2811.2	2733.0	2676.8	2627.5	2596.8	2578.1	2571.3	2569.6	2571.3
5°	3073.3	2967.8	2806.1	2704.0	2647.9	2615.5	2596.8	2595.1	2596.8	2598.5	2593.4
7.5°	3211.1	3059.7	2848.7	2753.4	2710.8	2687.0	2678.5	2675.1	2676.8	2675.1	2675.1
10°	3394.9	3187.3	2932.1	2833.4	2797.6	2770.4	2756.8	2748.3	2741.5	2734.7	2731.3
12.5°	3597.4	3328.6	3022.2	2927.0	2875.9	2833.4	2802.7	2780.6	2765.3	2750.0	2746.6
15°	3823.8	3478.3	3122.7	2989.9	2916.7	2853.8	2801.0	2765.3	2738.1	2715.9	2714.2
17.5°	4039.9	3619.6	3190.7	3018.8	2911.6	2823.1	2753.4	2704.0	2670.0	2641.1	2637.7
20°	4271.3	3754.0	3221.3	3000.1	2860.6	2753.4	2661.5	2601.9	2562.8	2530.5	2525.3
22.5°	4504.4	3868.0	3217.9	2940.6	2772.1	2646.2	2549.2	2486.2	2440.3	2407.9	2396.0
25°	4727.4	3959.9	3175.4	2845.3	2649.6	2518.5	2419.8	2362.0	2321.1	2282.0	2282.0
27.5°	4928.2	4014.3	3095.4	2729.6	2523.6	2385.8	2307.5	2254.8	2217.3	2191.8	2176.5
30°	5125.6	4039.9	2986.5	2583.2	2390.9	2273.5	2210.5	2179.9	2145.9	2116.9	2113.5
32.5°	5302.5	4034.8	2850.4	2440.3	2265.0	2181.6	2156.1	2132.3	2096.5	2055.7	2045.5
35°	5474.4	4000.7	2688.7	2283.7	2159.5	2127.1	2134.0	2099.9	2035.3	1984.2	1975.7
37.5°	5661.6	3939.5	2511.7	2156.1	2071.0	2101.6	2118.6	2043.8	1938.3	1858.3	1839.6
40°	5877.7	3869.7	2327.9	2028.4	2001.2	2077.8	2077.8	1940.0	1795.3	1746.0	1732.3
42.5°	6131.3	3811.8	2174.8	1921.2	1943.4	2019.9	2011.4	1802.1	1742.6	1717.0	1710.2
45°	6532.9	3791.4	2016.5	1827.6	1895.7	1951.9	1882.1	1754.5	1720.4	1700.0	1693.2
47.5°	7167.6	3815.2	1877.0	1757.9	1841.3	1883.8	1737.5	1722.1	1698.3	1669.4	1666.0
50°	7756.4	3793.1	1778.3	1718.7	1793.6	1802.1	1677.9	1683.0	1669.4	1637.1	1630.2
52.5°	8238.0	3723.4	1715.3	1698.3	1752.8	1659.2	1621.7	1640.5	1635.3	1594.5	1587.7
55°	8767.2	3680.8	1684.7	1698.3	1725.5	1534.9	1569.0	1596.2	1589.4	1560.5	1558.8
57.5°	9408.8	3689.3	1662.6	1703.4	1698.3	1472.0	1516.2	1548.6	1546.9	1538.4	1538.4
60°	10065.7	3692.7	1628.5	1701.7	1666.0	1422.6	1461.8	1507.7	1511.1	1516.2	1516.2
62.5°	10283.5	3544.7	1562.2	1671.1	1594.5	1375.0	1410.7	1473.7	1470.3	1483.9	1485.6
65°	9876.8	3134.6	1463.5	1601.3	1502.6	1341.0	1371.6	1429.4	1410.7	1446.5	1453.3
67.5°	8990.2	2593.4	1310.3	1475.4	1400.5	1305.2	1346.1	1368.2	1334.1	1403.9	1405.6
70°	7770.0	2025.0	1116.3	1296.7	1284.8	1267.8	1325.6	1291.6	1244.0	1329.0	1312.0
72.5°	6497.2	1546.9	891.7	1060.2	1129.9	1211.6	1289.9	1192.9	1126.5	1152.1	1121.4
75°	4880.5	1143.6	716.4	830.4	941.0	1131.6	1257.6	1073.8	971.7	947.9	941.0
77.5°	2487.9	747.1	536.0	621.1	706.2	1022.7	1213.3	934.2	804.9	767.5	750.5
80°	888.3	464.6	377.8	428.8	476.5	879.8	1060.2	772.6	624.5	617.7	624.5
82.5°	411.8	299.5	253.6	280.8	282.5	587.1	808.3	576.9	474.8	721.5	609.2
85°	177.0	149.8	142.9	139.5	129.3	262.1	454.4	309.7	483.3	216.1	199.1
87.5°	52.8	59.6	52.8	39.1	28.9	28.9	45.9	17.0	11.9	8.5	8.5
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)