

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: P454065

Luminaire Tested: **GALN-SA5A-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454065
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
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-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16931 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

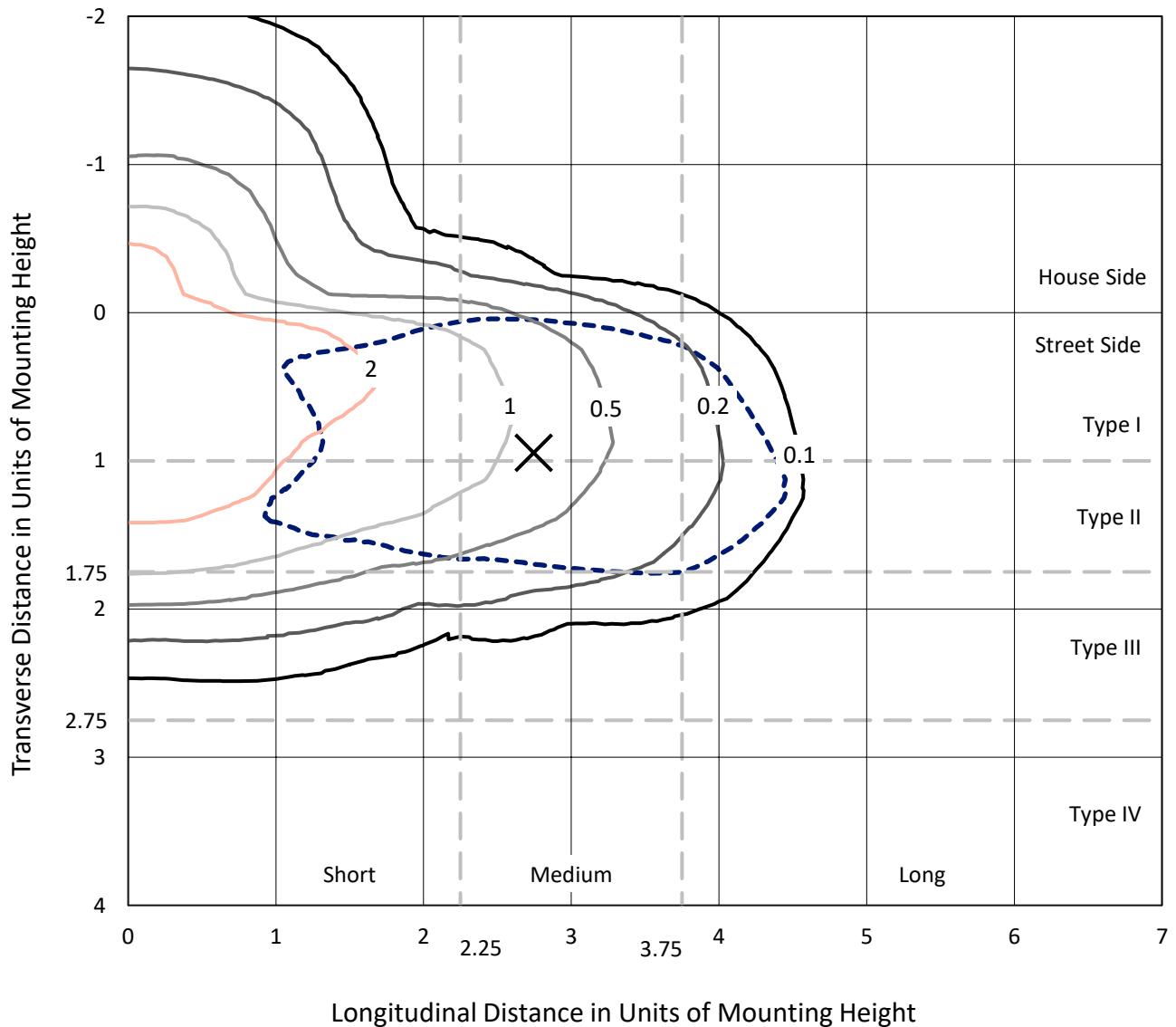
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

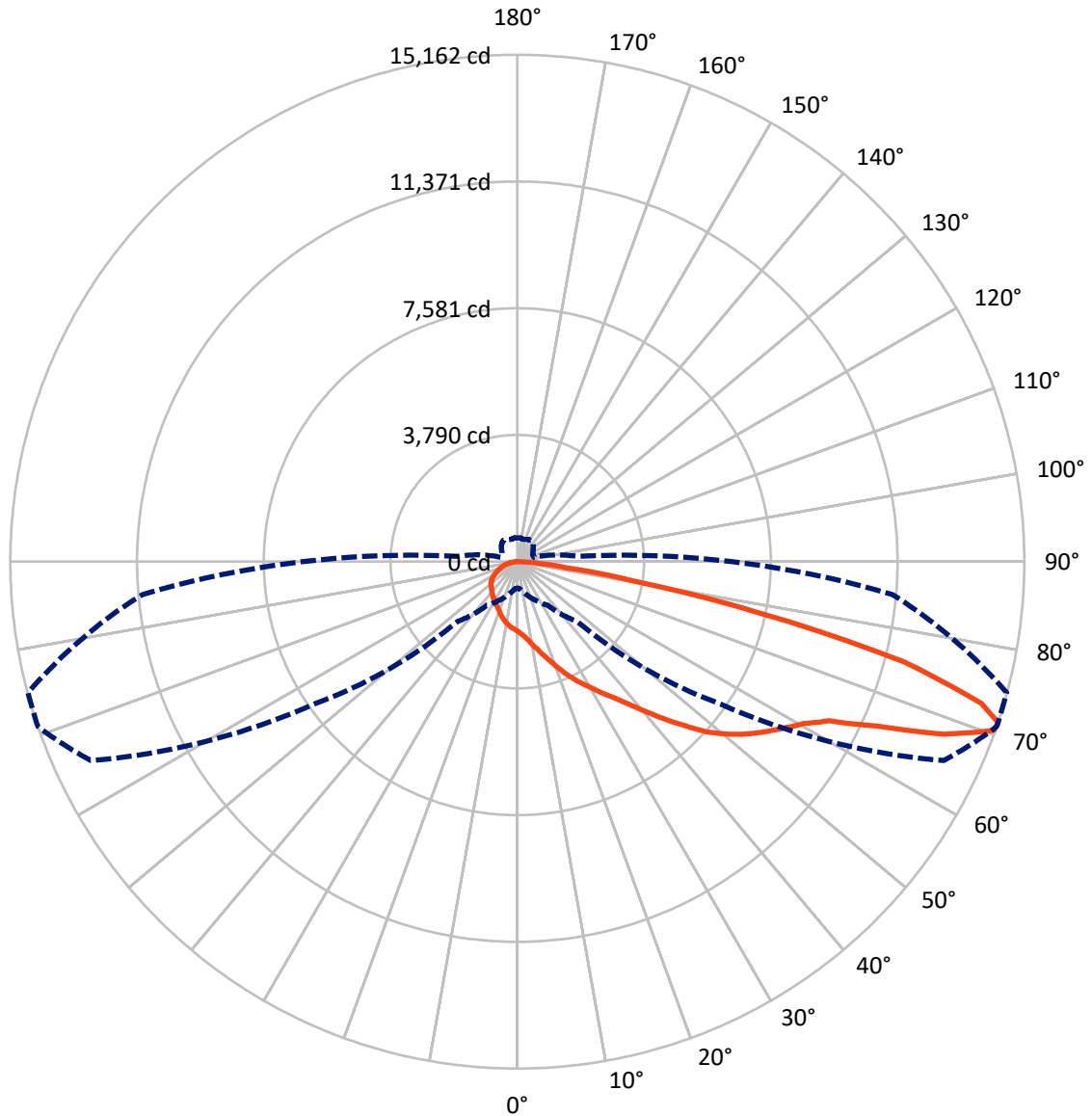
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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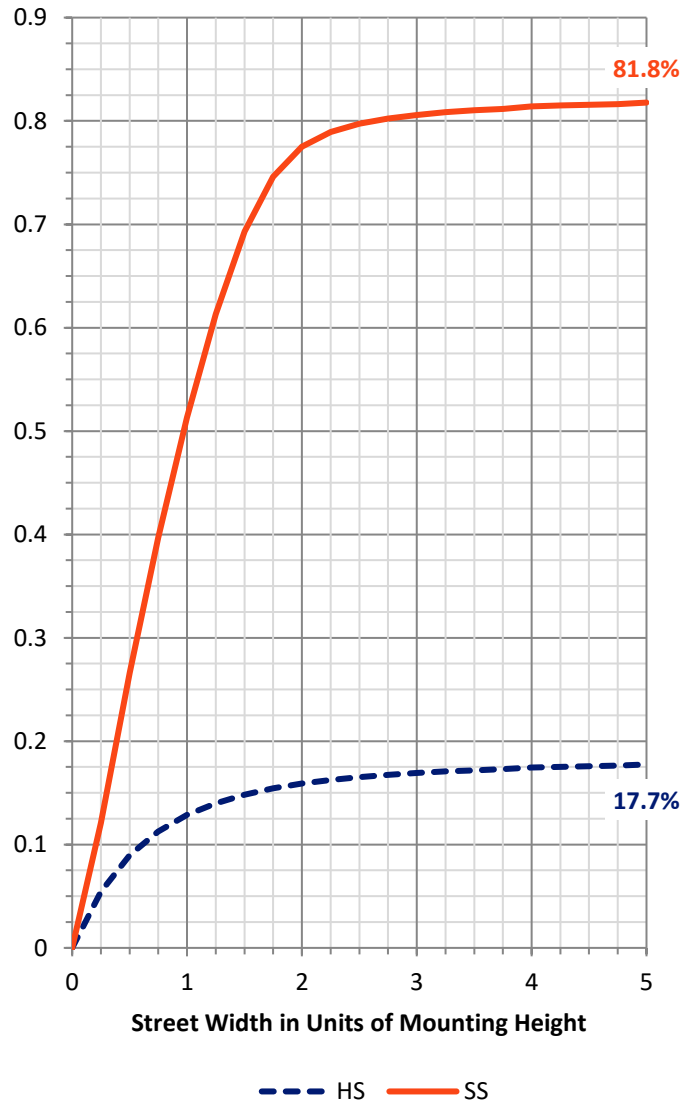
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3045.0	0.0	3045.0
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	13886.0	0.0	13886.0
	% Fixture	82.0	0.0	82.0
Total	Lumens	16931.0	0.0	16931.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.6	1.2
10°-20°	677.9	4.0
20°-30°	1184.6	7.0
30°-40°	1761.9	10.4
40°-50°	2596.0	15.3
50°-60°	3634.5	21.5
60°-70°	4065.0	24.0
70°-80°	2483.1	14.7
80°-90°	319.4	1.9
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°	16931.0	100.0
0°-180°	16931.0	100.0



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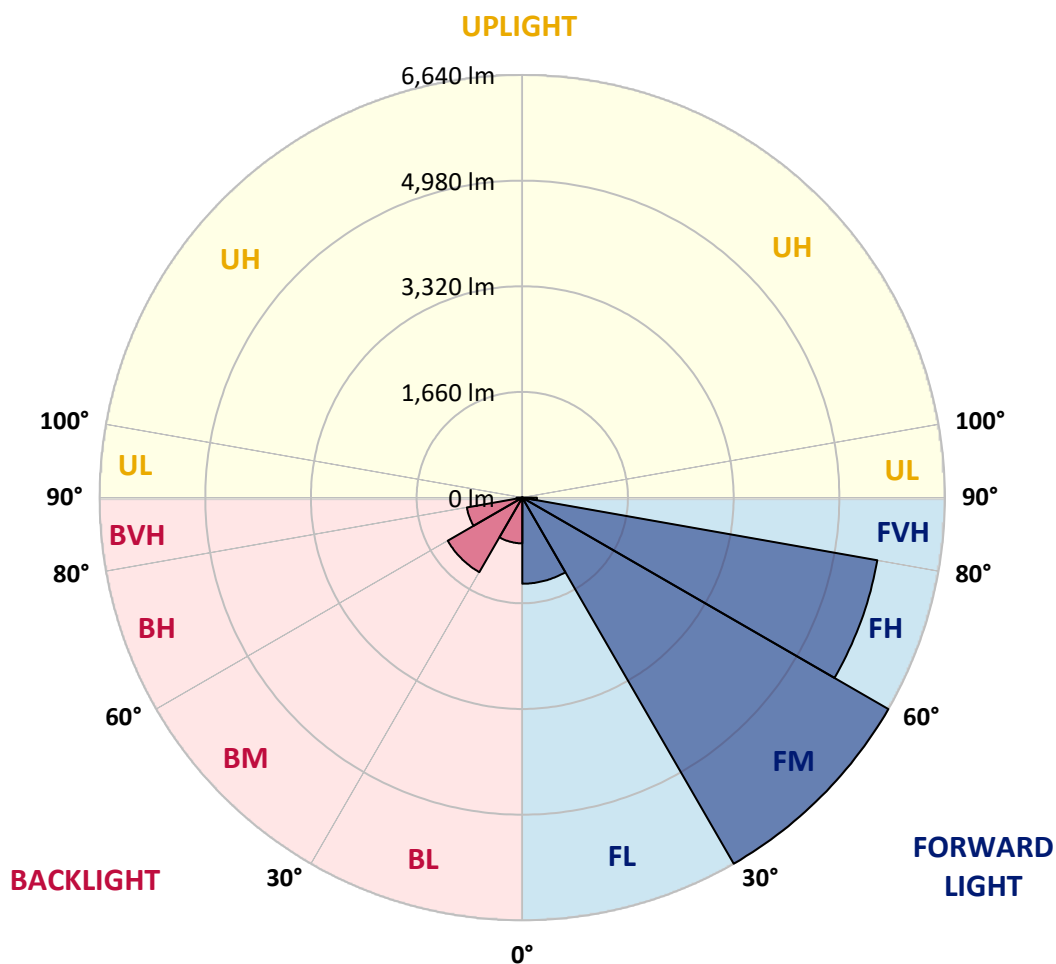
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1352.8	8.0			
FM	(30°-60°)	6640.0	39.2			
FH	(60°-80°)	5663.4	33.4			G3/7500
FVH	(80°-90°)	229.8	1.4			G3/500
BL	(0°-30°)	718.3	4.2	B2/1000		
BM	(30°-60°)	1352.4	8.0	B2/2500		
BH	(60°-80°)	884.7	5.2	B2/1000		G2/1000
BVH	(80°-90°)	89.6	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9
2.5°	2306.9	2295.7	2296.6	2280.8	2260.3	2238.0	2206.4	2178.4	2156.1	2143.1	2104.9
5°	2556.3	2545.1	2531.1	2496.7	2481.8	2426.9	2357.1	2293.8	2245.4	2218.5	2142.2
7.5°	2758.2	2755.4	2751.7	2732.1	2694.0	2617.7	2558.1	2448.3	2376.7	2325.5	2195.2
10°	2882.9	2887.5	2890.3	2894.0	2878.2	2838.2	2756.3	2617.7	2526.5	2461.3	2264.1
12.5°	2946.2	2950.8	2966.6	3001.1	3022.5	3017.8	2950.8	2815.0	2689.3	2603.7	2337.6
15°	2985.2	2992.7	3020.6	3066.2	3137.9	3183.5	3150.9	3025.3	2887.5	2786.1	2425.0
17.5°	3028.1	3036.4	3067.1	3132.3	3226.3	3324.9	3360.3	3252.3	3102.5	2981.5	2522.8
20°	3052.2	3063.4	3107.1	3192.8	3302.6	3445.9	3563.1	3506.4	3342.6	3208.6	2635.4
22.5°	3091.3	3100.6	3137.9	3229.1	3360.3	3539.9	3766.0	3753.9	3609.7	3436.6	2759.1
25°	3197.4	3212.3	3230.9	3285.8	3412.4	3635.7	3934.4	4018.2	3868.3	3674.8	2872.6
27.5°	3397.5	3409.6	3408.7	3416.1	3487.7	3718.5	4080.5	4279.7	4125.2	3915.8	2982.5
30°	3625.5	3630.1	3633.8	3617.1	3632.9	3803.2	4214.5	4538.4	4383.9	4163.3	3078.3
32.5°	3902.8	3912.1	3880.4	3837.6	3824.6	3928.8	4325.3	4797.1	4690.0	4414.6	3173.2
35°	4230.3	4254.5	4190.3	4114.9	4061.9	4109.4	4474.1	5061.3	5003.6	4735.6	3298.8
37.5°	4604.4	4634.2	4574.6	4426.7	4351.3	4364.3	4668.6	5388.0	5400.1	5101.3	3485.9
40°	4910.6	4949.7	4951.5	4742.1	4627.7	4642.6	4915.2	5739.7	5878.4	5553.6	3706.4
42.5°	5112.5	5150.7	5190.7	5067.8	4947.8	5032.5	5202.8	6121.2	6416.2	6102.6	4014.4
45°	5334.0	5368.4	5390.7	5334.9	5267.9	5487.5	5549.9	6527.0	6989.5	6715.9	4351.3
47.5°	5590.8	5629.0	5650.4	5597.3	5572.2	5886.7	5924.0	6905.7	7601.8	7311.4	4723.5
50°	5933.3	5962.1	5950.9	5917.4	5911.9	6192.9	6283.2	7260.2	8107.1	7952.6	5109.7
52.5°	6359.5	6393.9	6406.0	6358.5	6337.1	6411.6	6572.6	7583.2	8566.8	8503.5	5522.0
55°	6617.2	6672.1	6856.4	6930.8	6982.0	6694.5	6884.3	7939.6	8979.0	9084.2	5964.9
57.5°	6286.9	6357.6	6769.8	7142.1	7623.2	7401.7	7326.3	8311.8	9391.2	9647.1	6495.3
60°	5481.0	5496.8	6028.2	6714.0	7681.8	8310.9	8248.5	8903.6	9837.9	10214.8	7194.2
62.5°	3802.3	3835.8	4463.9	5558.3	6957.8	8638.4	9817.4	9925.4	10478.1	11064.4	8218.7
65°	1960.7	1917.0	2489.3	3493.3	5245.6	7860.5	11088.6	11804.2	11866.5	12393.2	9661.1
67.5°	1206.9	1226.5	1494.5	2039.8	3101.6	5712.7	10955.5	14099.9	13771.4	14024.5	11000.2
70°	906.4	930.6	1114.8	1395.8	1890.9	3266.3	8810.6	14656.4	15115.1	15050.0	11407.8
71°	788.2	813.3	1005.0	1270.2	1588.5	2520.9	7423.1	14073.8	15161.7	15150.5	11254.2
72.5°	671.9	687.7	837.5	1075.7	1339.1	1767.1	5576.9	12622.2	14514.9	14886.2	10706.1
75°	527.6	539.7	606.7	820.8	1054.3	1085.0	2992.7	9462.9	11921.4	12628.7	8912.9
77.5°	429.9	438.3	472.7	609.5	813.3	768.6	1569.9	6159.4	7468.7	8180.6	5250.2
80°	341.5	350.8	371.3	413.2	609.5	548.1	749.1	3121.1	3607.8	3600.3	2095.6
82.5°	265.2	268.0	292.2	303.4	416.9	389.0	405.7	1321.4	1463.8	1512.2	756.5
85°	167.5	175.9	258.7	232.6	249.4	228.0	200.1	524.8	646.7	637.4	302.4
87.5°	51.2	54.0	87.5	98.6	110.7	99.6	73.5	154.5	188.9	204.7	75.4
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°	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9	2077.9
2.5°	2090.0	2079.8	2043.5	2013.7	1985.8	1955.1	1929.1	1921.6	1915.1	1912.3	1911.4
5°	2109.6	2078.9	2007.2	1948.6	1902.1	1859.3	1832.3	1820.2	1808.1	1808.1	1811.8
7.5°	2137.5	2081.7	1970.9	1883.5	1824.8	1784.8	1765.3	1763.4	1766.2	1769.0	1769.9
10°	2168.2	2079.8	1917.9	1809.0	1756.9	1738.3	1739.2	1755.0	1769.9	1781.1	1783.0
12.5°	2198.0	2068.6	1855.5	1739.2	1705.7	1709.4	1735.5	1770.9	1799.7	1815.5	1816.5
15°	2231.5	2051.0	1780.2	1673.2	1662.0	1690.8	1739.2	1793.2	1836.9	1863.0	1865.8
17.5°	2259.4	2021.2	1701.1	1608.9	1622.9	1675.9	1742.9	1812.7	1865.8	1898.3	1903.9
20°	2291.0	1983.0	1619.2	1547.5	1587.5	1659.2	1735.5	1810.9	1865.8	1897.4	1904.9
22.5°	2316.2	1929.1	1541.0	1497.3	1555.9	1638.7	1710.4	1770.9	1815.5	1832.3	1843.4
25°	2326.4	1861.1	1467.5	1456.3	1530.8	1605.2	1653.6	1688.0	1702.0	1700.1	1704.8
27.5°	2320.8	1783.0	1404.2	1423.8	1499.1	1553.1	1577.3	1574.5	1549.4	1526.1	1537.3
30°	2297.6	1689.9	1351.2	1390.3	1458.2	1488.0	1484.2	1448.0	1400.5	1356.8	1359.6
32.5°	2255.7	1589.4	1301.9	1352.1	1400.5	1413.5	1388.4	1340.9	1273.0	1216.2	1207.9
35°	2220.3	1493.6	1258.1	1308.4	1342.8	1336.3	1312.1	1250.7	1189.3	1139.0	1130.6
37.5°	2214.7	1411.7	1216.2	1259.1	1278.6	1269.3	1239.5	1187.4	1165.1	1126.9	1122.3
40°	2244.5	1354.0	1173.4	1206.9	1216.2	1208.8	1176.2	1146.5	1166.9	1157.6	1157.6
42.5°	2325.5	1323.3	1135.3	1154.8	1162.3	1167.9	1144.6	1119.5	1144.6	1101.8	1087.8
45°	2453.9	1324.2	1100.9	1103.6	1126.0	1145.5	1129.7	1092.5	1079.5	993.8	977.1
47.5°	2642.8	1355.8	1072.9	1055.3	1095.3	1127.8	1105.5	1051.5	993.8	937.1	926.8
50°	2863.3	1412.6	1047.8	1005.0	1054.3	1105.5	1088.8	1025.5	965.9	931.5	925.0
52.5°	3108.1	1484.2	1017.1	949.2	1004.1	1095.3	1092.5	1021.8	939.9	916.6	911.0
55°	3410.5	1555.0	979.0	884.0	959.4	1086.9	1082.2	991.0	934.3	917.5	915.7
57.5°	3762.3	1657.3	924.0	818.0	908.2	1052.5	1042.2	972.4	915.7	903.6	902.6
60°	4329.0	1816.5	845.9	757.5	856.1	992.0	1005.0	940.8	885.9	883.1	882.2
62.5°	5074.4	2039.8	764.9	695.1	795.6	913.8	951.0	898.0	854.3	868.2	870.1
65°	6103.6	2227.8	681.2	642.1	728.6	838.4	899.9	858.0	818.9	845.9	845.9
67.5°	6774.5	2231.5	604.9	587.2	660.7	775.2	845.9	810.5	773.3	818.9	820.8
70°	6634.9	1955.1	541.6	529.5	594.6	707.2	786.3	758.4	715.6	756.5	741.7
71°	6409.7	1801.6	516.5	507.2	568.6	674.7	758.4	735.1	692.3	719.3	710.9
72.5°	6050.5	1564.3	475.5	477.4	529.5	633.7	719.3	695.1	652.3	667.2	664.4
75°	5114.4	1366.1	406.7	415.0	455.0	563.9	641.2	622.5	578.8	578.8	576.0
77.5°	3197.4	954.8	337.8	342.4	386.2	483.0	550.9	535.1	493.2	479.2	475.5
80°	1193.0	493.2	264.3	269.9	296.8	380.6	456.0	441.1	398.3	382.5	367.6
82.5°	451.3	247.5	194.5	189.8	218.7	290.3	357.3	339.7	306.2	268.0	256.8
85°	170.3	122.8	119.1	115.4	128.4	172.2	221.5	217.8	182.4	155.4	152.6
87.5°	44.7	40.0	46.5	34.4	36.3	32.6	33.5	14.0	6.5	2.8	1.9
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)