

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: P651416

Luminaire Tested: **GALN-SA5D-840-U-T2R-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651416  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-840-U-T2R-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21548.1 lumens  
Efficiency: N/A  
Efficacy: 69.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B2 - U0 - G1

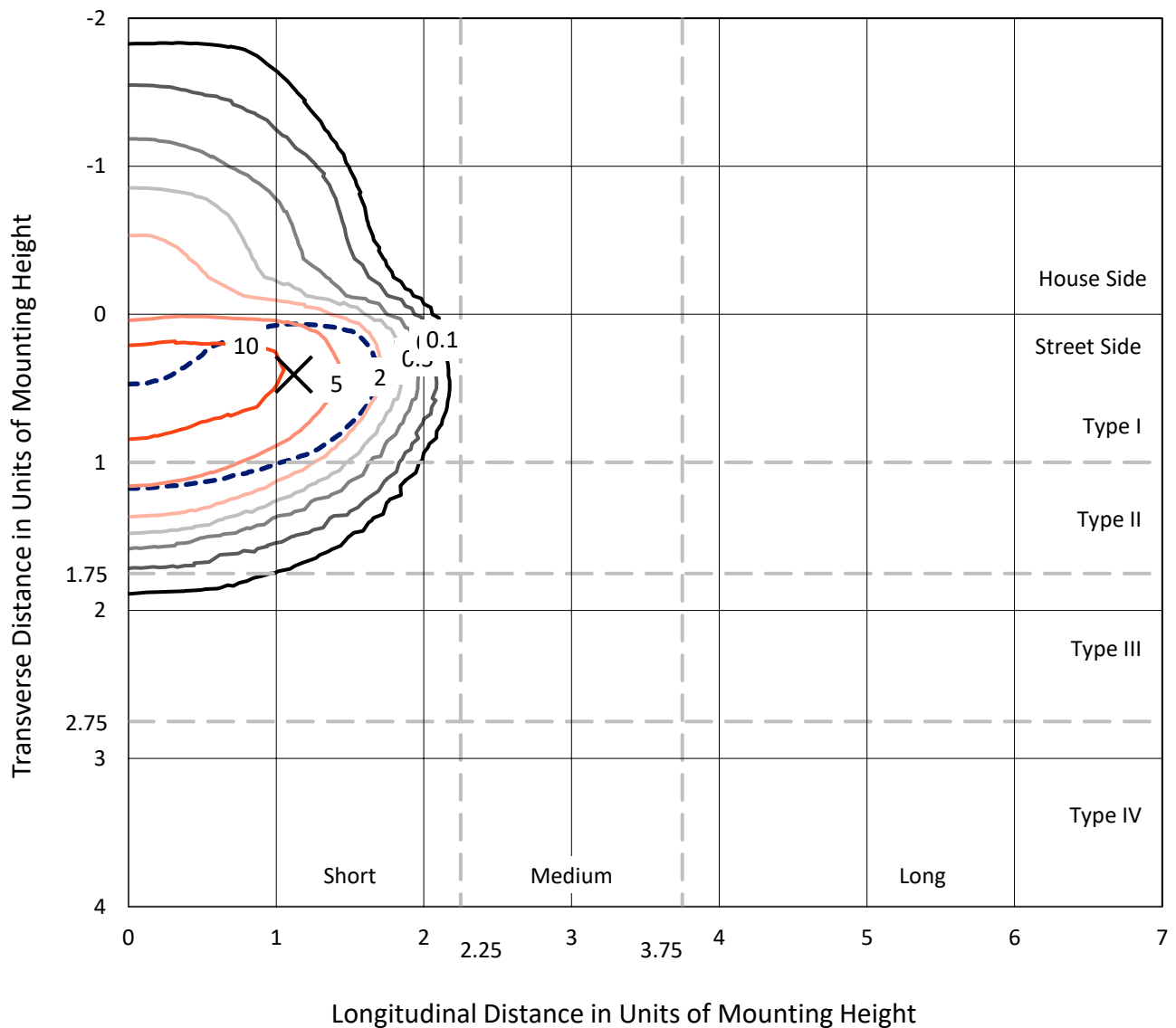
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

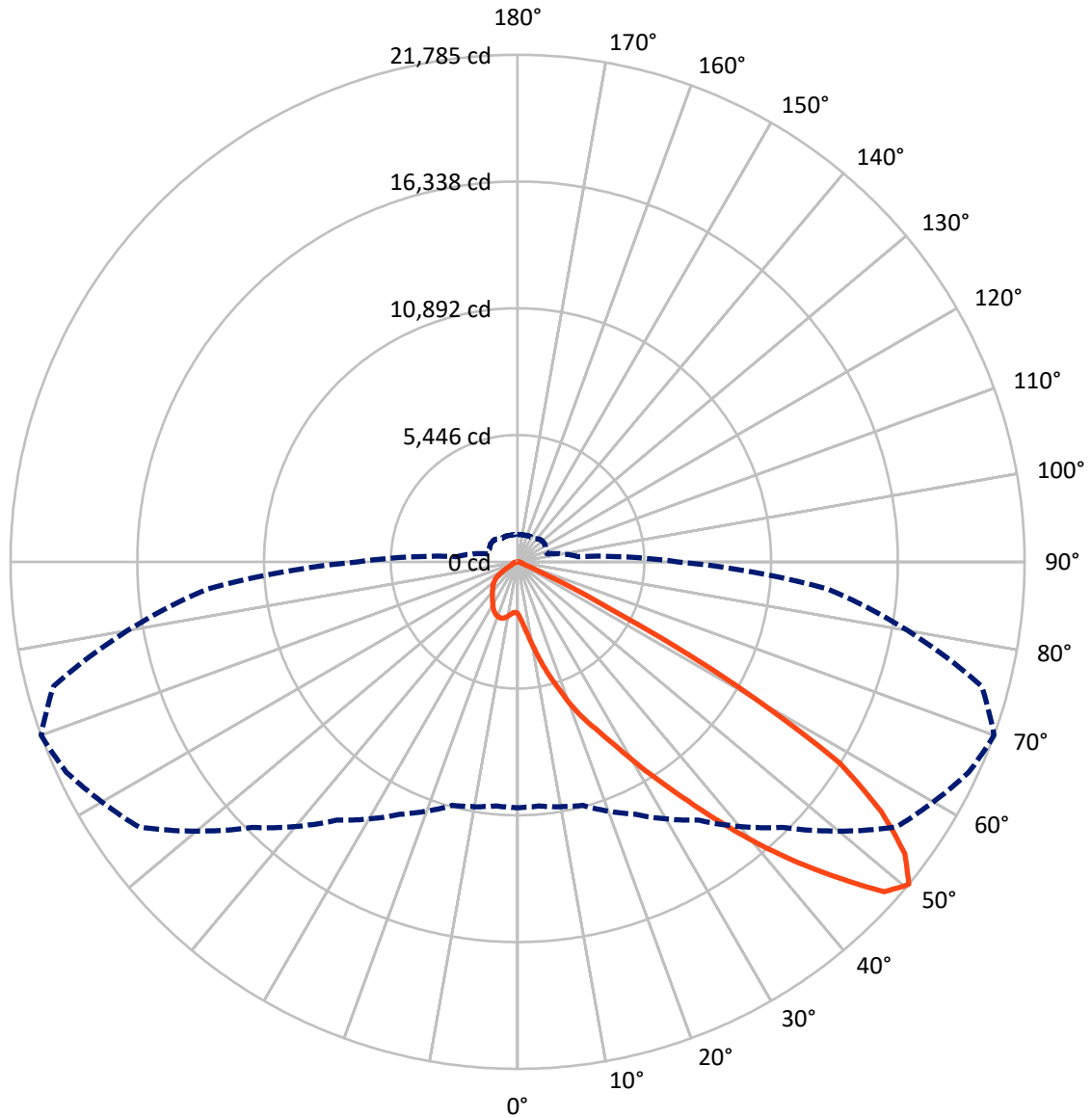
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral      - - - Horizontal Cone Through 50-Deg Vertical

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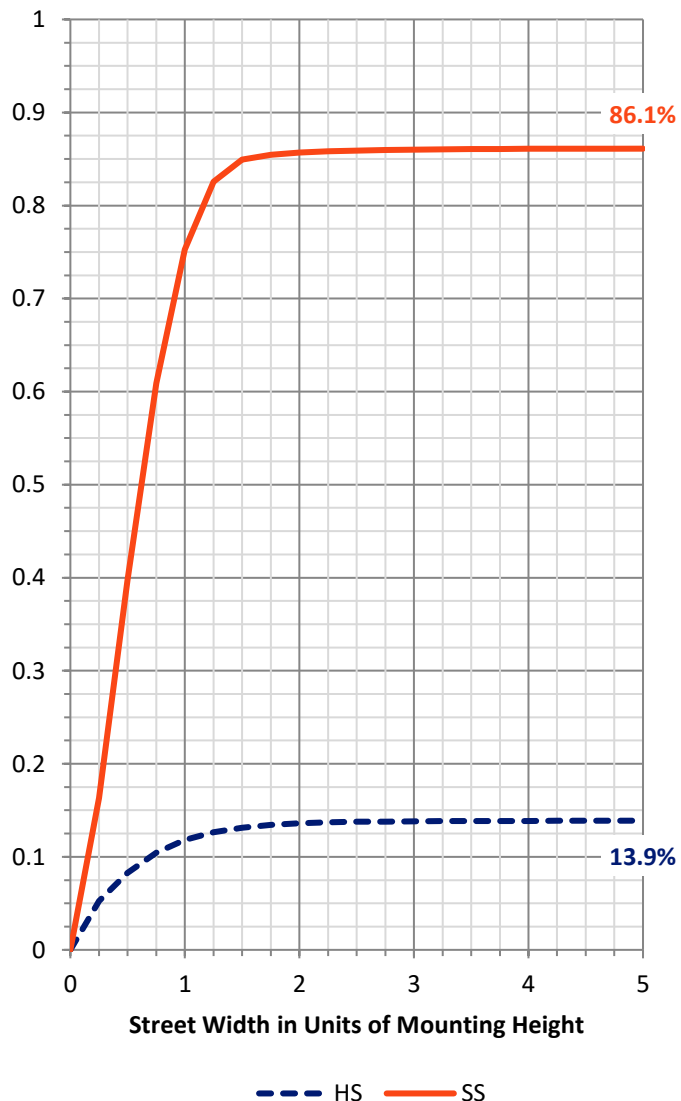
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3009.3	0.0	3009.3
	% Fixture	14.0	0.0	14.0
<b>Street Side</b>	Lumens	18538.8	0.0	18538.8
	% Fixture	86.0	0.0	86.0
<b>Total</b>	Lumens	21548.1	0.0	21548.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	290.2	1.3
10°-20°	1255.5	5.8
20°-30°	2633.7	12.2
30°-40°	4539.7	21.1
40°-50°	6634.7	30.8
50°-60°	5167.3	24.0
60°-70°	875.5	4.1
70°-80°	120.3	0.6
80°-90°	31.2	0.1
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°	21548.1	100.0
0°-180°	21548.1	100.0

**Coefficient of Utilization**



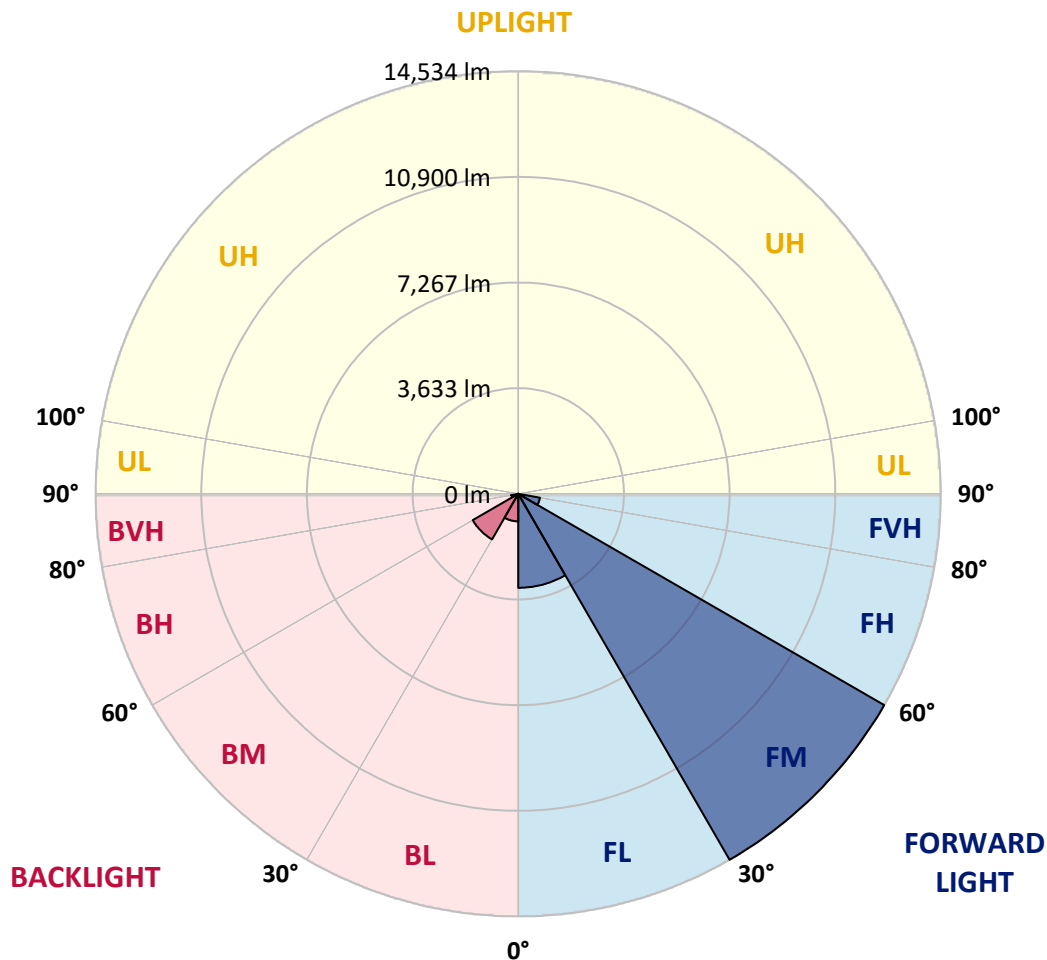
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3232.5	15.0			
FM (30°-60°)	14533.8	67.4			
FH (60°-80°)	758.1	3.5			G1/1800
FVH (80°-90°)	14.4	0.1			G1/100
BL (0°-30°)	947.0	4.4	B2/1000		
BM (30°-60°)	1807.9	8.4	B2/2500		
BH (60°-80°)	237.7	1.1	B1/500		G1/500
BVH (80°-90°)	16.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9
2.5°	2922.8	2901.5	2855.5	2770.4	2735.0	2650.0	2600.4	2504.8	2444.5	2377.3	2302.8
5°	4116.7	4006.9	3939.6	3844.0	3564.1	3390.5	3103.5	2859.1	2745.7	2621.6	2451.6
7.5°	5349.6	5278.8	5186.6	4981.2	4789.8	4428.5	3936.0	3397.6	3167.3	2954.7	2618.1
10°	6369.9	6171.5	6160.9	6008.6	5799.5	5367.3	4775.7	4106.1	3695.1	3383.3	2855.5
12.5°	7082.1	6901.3	6982.8	6965.2	6770.3	6373.5	5689.7	4804.0	4375.4	3890.0	3099.9
15°	7730.4	7656.0	7631.1	7610.0	7532.0	7237.9	6625.1	5654.3	5034.3	4449.7	3376.3
17.5°	8364.5	8173.3	8265.3	8283.0	8275.9	8010.3	7436.3	6462.1	5732.3	5041.4	3666.8
20°	8927.8	8945.5	8821.6	8796.8	8775.5	8764.9	8205.1	7262.7	6589.6	5661.4	4045.9
22.5°	9650.6	9526.6	9636.4	9565.5	9427.4	9342.3	8913.7	7971.3	7333.6	6408.9	4432.1
25°	10504.3	10603.6	10345.0	10316.6	10164.2	9870.2	9484.0	8764.9	8049.2	7103.3	4850.0
27.5°	11556.6	11383.0	11315.7	11159.8	10883.5	10759.5	10306.0	9583.3	8913.7	7833.1	5254.0
30°	12460.0	12413.9	12077.3	11893.2	11652.2	11648.7	11014.6	10692.1	10040.3	8977.4	5810.2
32.5°	13196.9	12995.0	12871.0	12743.4	12548.6	12601.7	12066.8	11896.7	11241.3	10040.3	6465.6
35°	13689.4	13544.1	13469.7	13274.8	13218.2	13455.5	13232.3	13161.5	12623.0	11535.3	7234.4
37.5°	13845.2	13891.3	13877.1	13632.7	13753.1	14394.4	14681.3	14497.1	14213.7	13111.9	8067.0
40°	13983.4	14015.3	13944.5	14231.4	14575.0	15304.9	16342.9	16038.2	15931.9	14709.7	9225.4
42.5°	14061.4	14036.5	14036.5	14532.6	15053.3	16520.0	17947.8	17745.9	17664.4	16410.2	10564.6
45°	13724.8	13483.8	13742.5	14415.6	15464.3	17118.8	19230.3	19510.2	19393.2	18433.1	12130.5
47.5°	12467.1	12615.8	12761.2	13661.0	14964.8	16934.5	20016.8	20969.7	21185.9	20133.7	13157.9
50°	10564.6	10532.7	10833.8	11967.5	13551.2	16141.0	19864.4	21391.3	21784.6	20643.9	13374.0
52.5°	7684.3	7918.1	8244.1	9370.7	11248.4	14086.2	17898.2	20303.8	20828.0	20016.8	13232.3
55°	4474.5	4215.9	4949.3	5902.3	7673.7	10624.9	15131.3	17997.4	18968.1	18876.0	12516.7
57.5°	1792.7	1736.0	1987.5	2678.3	4003.3	6586.0	11003.9	14787.6	16342.9	17288.9	11000.4
60°	786.5	768.8	903.4	1091.2	1636.8	3036.2	6019.2	9197.1	10819.7	12080.9	7570.9
62.5°	566.8	559.8	627.0	694.4	864.5	1321.5	2529.6	3705.8	4619.8	5579.9	3390.5
65°	457.0	474.7	520.8	556.2	637.7	733.4	892.8	1031.0	1264.8	1310.9	747.6
67.5°	372.0	386.2	428.7	467.7	481.8	396.8	411.0	361.4	361.4	322.4	258.6
70°	272.8	276.4	326.0	372.0	297.6	159.5	279.9	279.9	251.5	240.9	219.7
72.5°	201.9	205.5	244.5	230.3	116.9	99.2	205.5	226.7	205.5	194.9	177.1
75°	148.8	152.3	127.6	53.2	49.6	63.7	120.4	155.9	148.8	145.2	134.6
77.5°	28.3	21.3	17.7	24.8	35.4	53.2	78.0	95.6	99.2	106.3	99.2
80°	3.5	3.5	10.6	21.3	38.9	56.7	81.5	92.1	95.6	99.2	92.1
82.5°	0.0	3.5	10.6	21.3	38.9	53.2	70.9	81.5	88.6	92.1	88.6
85°	0.0	3.5	7.1	17.7	31.9	38.9	35.4	24.8	21.3	24.8	17.7
87.5°	0.0	0.0	3.5	3.5	7.1	7.1	7.1	7.1	7.1	7.1	7.1
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°	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9	2231.9
2.5°	2260.3	2246.1	2196.5	2143.4	2097.4	2118.6	2097.4	2079.6	2086.7	2079.6	2072.6
5°	2384.3	2320.5	2214.3	2168.2	2129.2	2125.7	2115.0	2111.5	2115.0	2115.0	2083.2
7.5°	2501.2	2398.4	2285.1	2235.5	2189.5	2193.0	2168.2	2168.2	2164.6	2146.9	2139.8
10°	2678.3	2540.2	2394.9	2306.4	2249.7	2239.1	2214.3	2189.5	2189.5	2189.5	2154.1
12.5°	2873.2	2699.6	2501.2	2398.4	2331.2	2278.0	2239.1	2231.9	2193.0	2185.9	2168.2
15°	3043.2	2823.6	2572.0	2430.3	2345.3	2274.5	2214.3	2175.2	2157.6	2146.9	2132.8
17.5°	3209.8	2929.9	2611.1	2430.3	2338.2	2256.7	2193.0	2157.6	2115.0	2122.1	2093.8
20°	3433.0	3043.2	2621.6	2384.3	2271.0	2193.0	2108.0	2090.2	2065.4	2044.2	2051.3
22.5°	3649.1	3124.7	2589.8	2327.6	2164.6	2072.6	2030.0	2008.7	1998.1	1980.4	1955.7
25°	3844.0	3213.3	2540.2	2224.9	2051.3	1984.0	1945.0	1941.4	1916.6	1916.6	1870.6
27.5°	4042.4	3245.2	2455.1	2104.4	1952.0	1913.1	1895.4	1888.3	1877.7	1852.9	1821.0
30°	4269.1	3255.8	2331.2	1980.4	1863.5	1821.0	1845.8	1863.5	1817.5	1771.4	1785.5
32.5°	4456.8	3231.0	2182.4	1863.5	1799.7	1778.5	1828.1	1845.8	1792.7	1743.1	1718.2
35°	4683.6	3170.8	2037.1	1771.4	1736.0	1778.5	1821.0	1821.0	1714.7	1654.5	1640.3
37.5°	5027.2	3103.5	1902.5	1693.4	1668.6	1757.2	1813.9	1774.9	1608.4	1534.1	1516.3
40°	5395.7	3061.0	1771.4	1615.5	1633.2	1721.8	1753.7	1633.2	1463.2	1417.1	1403.0
42.5°	5930.6	2976.0	1654.5	1548.2	1601.3	1672.2	1672.2	1456.1	1392.3	1367.6	1363.9
45°	6596.7	2915.7	1551.7	1491.5	1555.3	1573.0	1516.3	1363.9	1317.9	1310.9	1314.4
47.5°	6922.6	2798.8	1445.4	1424.2	1470.2	1473.8	1325.0	1289.6	1250.6	1240.0	1232.9
50°	6873.0	2589.8	1307.3	1335.6	1399.4	1363.9	1208.1	1215.2	1179.8	1176.2	1158.5
52.5°	6525.8	2260.3	1169.2	1236.4	1307.3	1204.6	1112.5	1105.3	1105.3	1059.3	1041.6
55°	5785.4	1821.0	1002.6	1087.7	1172.7	1013.2	988.4	981.4	963.6	921.1	910.5
57.5°	4580.8	1335.6	754.6	846.7	995.5	860.9	857.3	825.4	779.4	747.6	747.6
60°	2724.4	768.8	474.7	517.2	658.9	697.9	775.9	761.7	683.7	634.2	620.0
62.5°	1243.5	396.8	301.2	308.2	354.3	453.5	609.4	705.0	595.2	510.2	503.1
65°	418.1	294.0	248.0	237.3	244.5	272.8	364.9	499.6	474.7	393.3	379.0
67.5°	255.1	262.1	233.8	216.1	216.1	212.6	209.0	226.7	279.9	272.8	276.4
70°	219.7	240.9	216.1	194.9	187.8	177.1	148.8	124.0	106.3	124.0	131.1
72.5°	177.1	191.3	184.3	166.5	148.8	134.6	106.3	81.5	60.2	53.2	53.2
75°	131.1	141.7	148.8	127.6	113.4	95.6	78.0	53.2	31.9	21.3	21.3
77.5°	95.6	106.3	109.8	99.2	85.0	67.3	49.6	35.4	17.7	7.1	7.1
80°	81.5	95.6	106.3	99.2	88.6	63.7	46.1	24.8	14.2	3.5	3.5
82.5°	78.0	95.6	106.3	95.6	85.0	60.2	46.1	28.3	10.6	3.5	3.5
85°	17.7	24.8	31.9	38.9	46.1	46.1	35.4	21.3	10.6	3.5	3.5
87.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	3.5	3.5	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)