

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: P651361

Luminaire Tested: **GALN-SA4D-840-U-T2R-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651361  
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-SA4D-840-U-T2R-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 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: 17021.8 lumens  
Efficiency: N/A  
Efficacy: 69.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B2 - U0 - G1

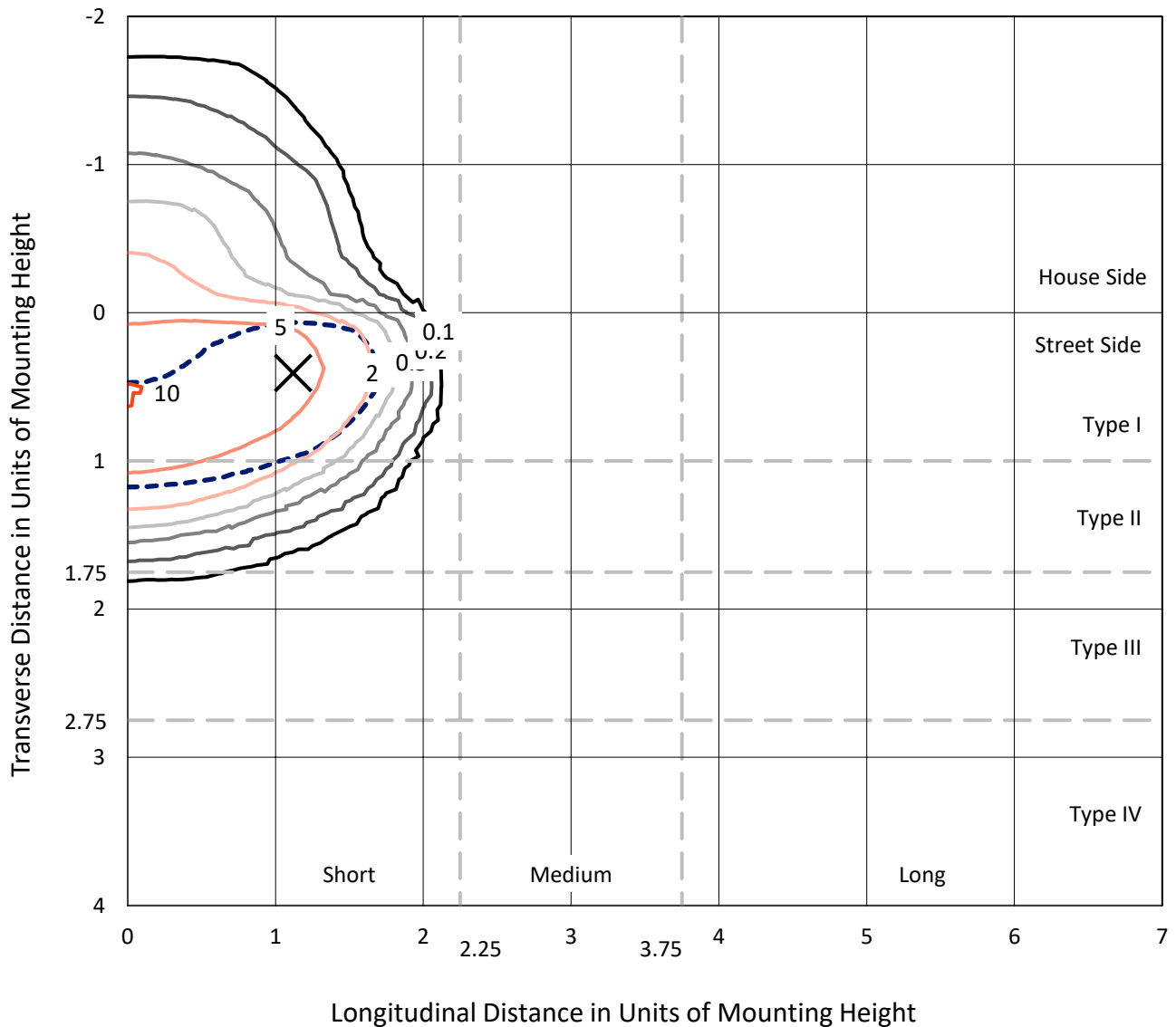
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

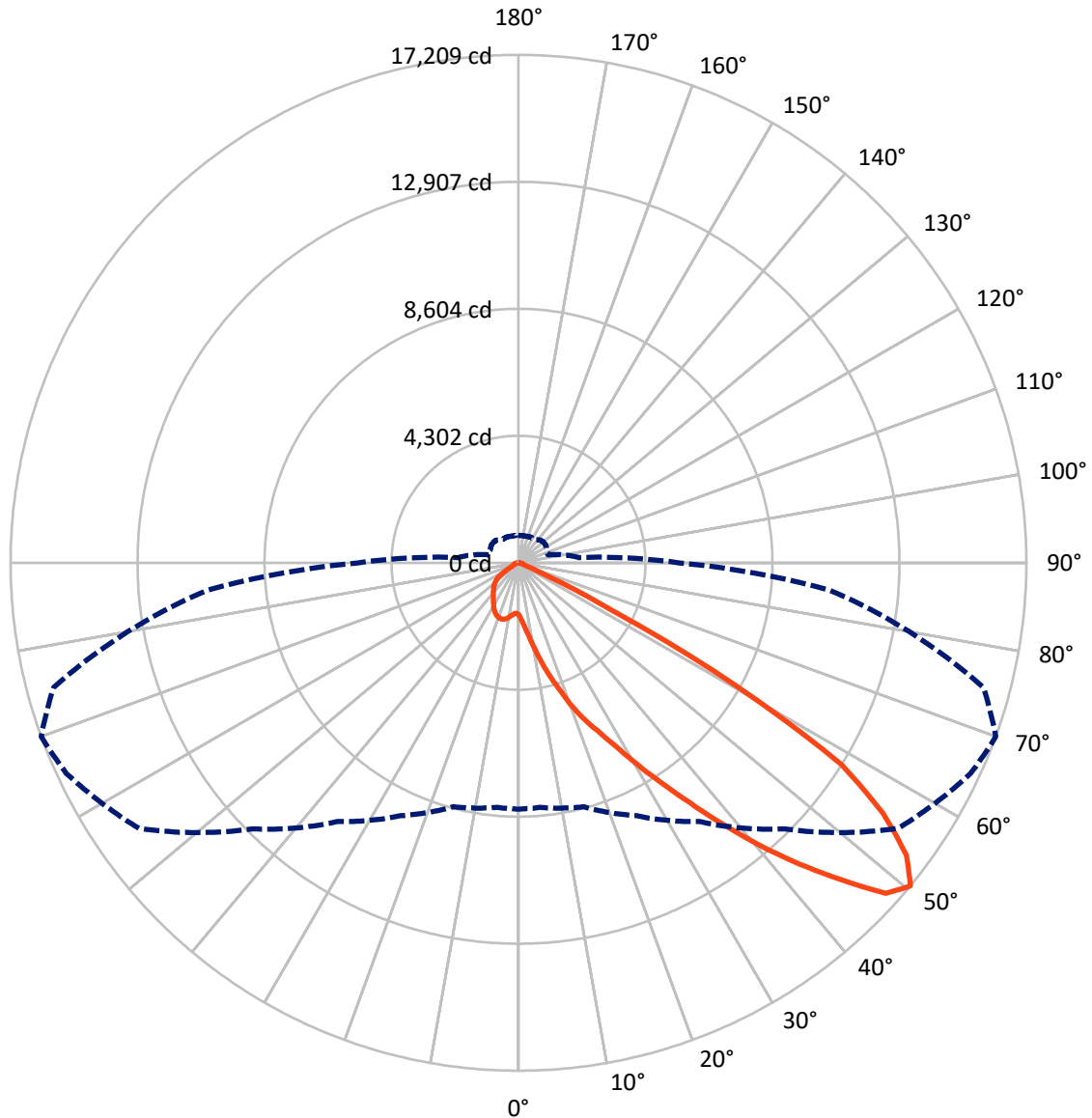
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 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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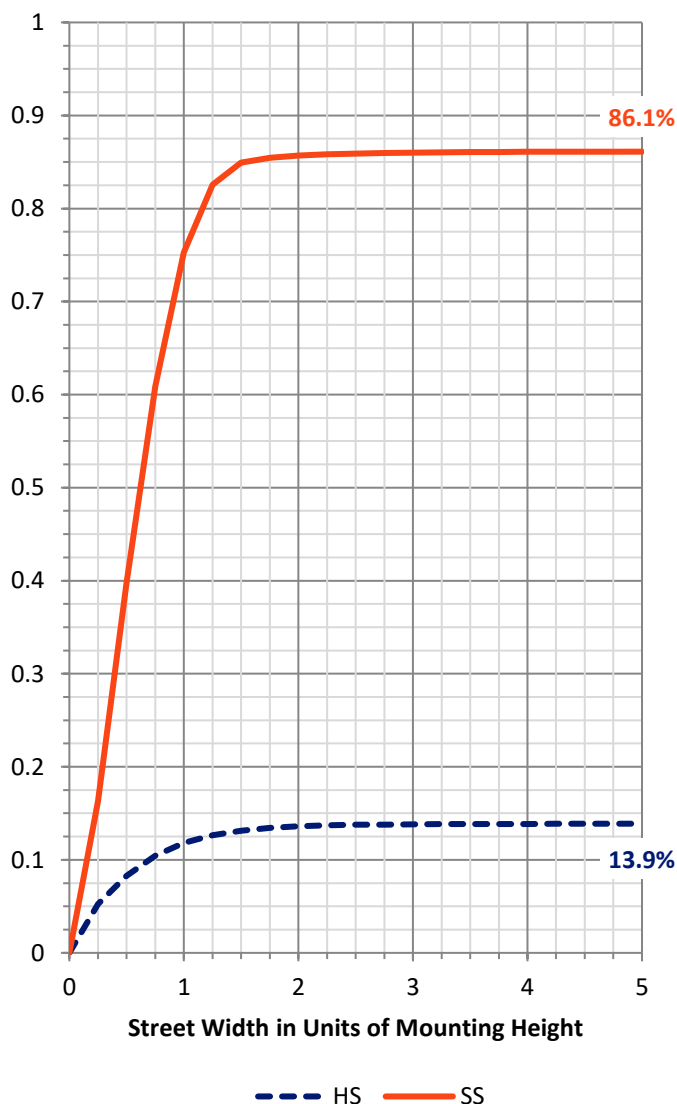
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2377.2	0.0	2377.2
	% Fixture	14.0	0.0	14.0
<b>Street Side</b>	Lumens	14644.6	0.0	14644.6
	% Fixture	86.0	0.0	86.0
<b>Total</b>	Lumens	17021.8	0.0	17021.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.3	1.3
10°-20°	991.7	5.8
20°-30°	2080.5	12.2
30°-40°	3586.1	21.1
40°-50°	5241.1	30.8
50°-60°	4081.9	24.0
60°-70°	691.6	4.1
70°-80°	95.0	0.6
80°-90°	24.6	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°	17021.8	100.0
0°-180°	17021.8	100.0

**Coefficient of Utilization**

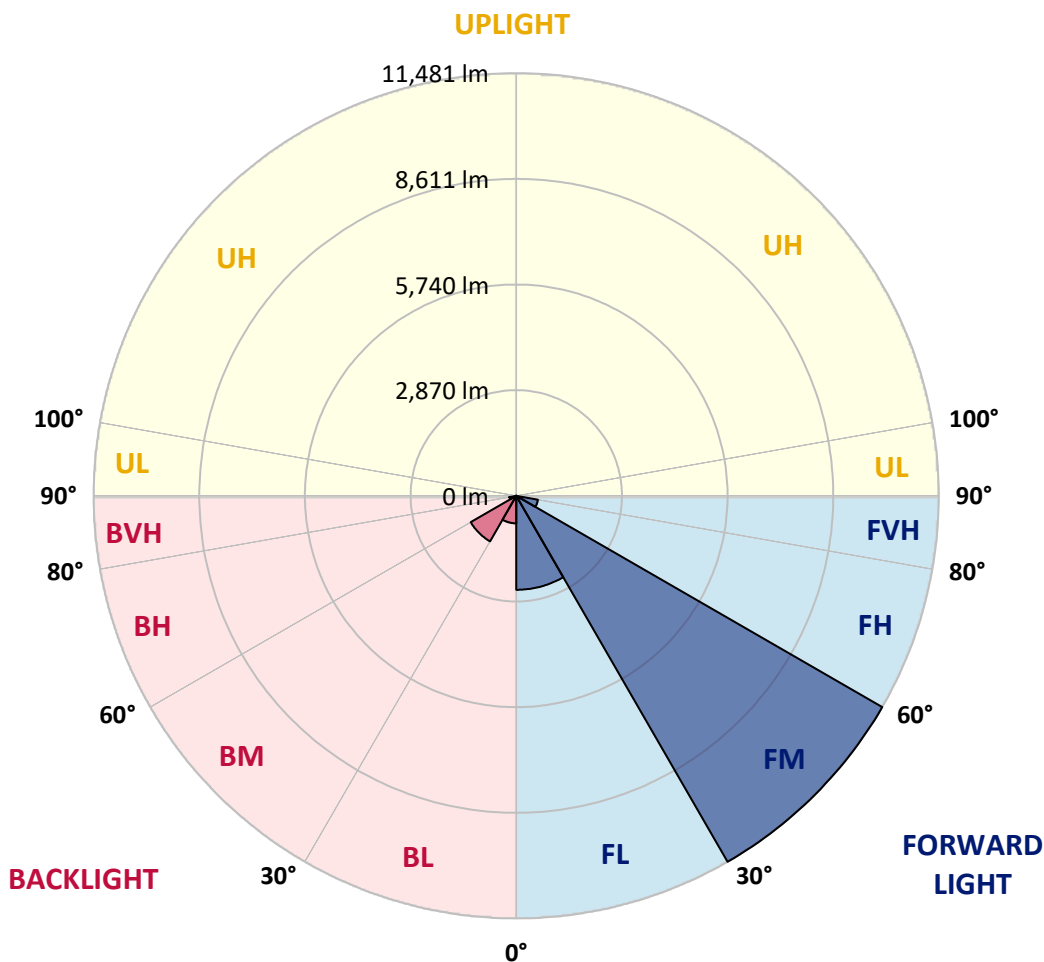


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2553.5	15.0			
FM (30°-60°)	11480.9	67.4			
FH (60°-80°)	598.8	3.5			G0/660
FVH (80°-90°)	11.4	0.1			G1/100
BL (0°-30°)	748.1	4.4	B2/1000		
BM (30°-60°)	1428.1	8.4	B2/2500		
BH (60°-80°)	187.8	1.1	B1/500		G1/500
BVH (80°-90°)	13.2	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°	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2
2.5°	2308.9	2292.1	2255.6	2188.5	2160.5	2093.3	2054.1	1978.6	1931.0	1877.9	1819.1
5°	3252.0	3165.3	3112.0	3036.5	2815.4	2678.2	2451.6	2258.5	2168.9	2071.0	1936.7
7.5°	4225.9	4169.9	4097.2	3934.9	3783.7	3498.3	3109.3	2683.9	2502.0	2334.0	2068.2
10°	5031.9	4875.2	4866.8	4746.4	4581.3	4239.9	3772.6	3243.6	2918.9	2672.7	2255.6
12.5°	5594.4	5451.7	5516.0	5502.1	5348.2	5034.7	4494.6	3794.9	3456.3	3072.8	2448.8
15°	6106.6	6047.8	6028.2	6011.4	5949.8	5717.5	5233.4	4466.6	3976.8	3515.0	2667.1
17.5°	6607.6	6456.4	6529.2	6543.1	6537.6	6327.7	5874.3	5104.7	4528.2	3982.4	2896.6
20°	7052.5	7066.5	6968.5	6948.9	6932.2	6923.8	6481.6	5737.1	5205.5	4472.2	3196.1
22.5°	7623.4	7525.4	7612.2	7556.3	7447.1	7379.9	7041.4	6296.9	5793.1	5062.7	3501.1
25°	8297.9	8376.3	8172.0	8149.5	8029.2	7796.9	7491.9	6923.8	6358.5	5611.2	3831.3
27.5°	9129.1	8992.0	8938.7	8815.6	8597.4	8499.4	8141.1	7570.3	7041.4	6187.7	4150.3
30°	9842.7	9806.3	9540.5	9395.0	9204.7	9201.9	8700.9	8446.2	7931.3	7091.6	4589.8
32.5°	10424.9	10265.3	10167.4	10066.6	9912.7	9954.7	9532.1	9397.8	8880.0	7931.3	5107.5
35°	10813.8	10699.1	10640.3	10486.4	10441.6	10629.1	10452.8	10396.9	9971.5	9112.3	5714.8
37.5°	10937.0	10973.4	10962.2	10769.1	10864.2	11370.7	11597.5	11451.9	11228.0	10357.7	6372.4
40°	11046.1	11071.3	11015.3	11242.1	11513.5	12090.0	12910.0	12669.3	12585.4	11619.8	7287.6
42.5°	11107.7	11088.1	11088.1	11479.9	11891.3	13050.0	14177.7	14018.3	13953.9	12963.2	8345.5
45°	10841.8	10651.5	10855.8	11387.6	12215.9	13522.9	15190.9	15412.0	15319.7	14561.2	9582.4
47.5°	9848.4	9965.8	10080.6	10791.5	11821.3	13377.4	15812.1	16565.0	16735.7	15904.5	10394.1
50°	8345.5	8320.3	8558.2	9453.7	10704.7	12750.5	15691.8	16898.0	17208.7	16307.5	10564.8
52.5°	6070.2	6254.9	6512.4	7402.3	8885.6	11127.3	14138.6	16038.9	16453.1	15812.1	10452.8
55°	3534.6	3330.4	3909.6	4662.5	6061.8	8393.0	11952.9	14216.9	14983.8	14911.0	9887.5
57.5°	1416.1	1371.3	1570.1	2115.8	3162.4	5202.6	8692.5	11681.4	12910.0	13657.3	8689.7
60°	621.3	607.3	713.7	861.9	1293.0	2398.4	4754.8	7265.2	8547.0	9543.2	5980.6
62.5°	447.7	442.2	495.3	548.5	682.9	1043.8	1998.2	2927.4	3649.4	4407.8	2678.2
65°	361.0	375.0	411.4	439.4	503.8	579.3	705.3	814.4	999.1	1035.5	590.5
67.5°	293.8	305.0	338.7	369.5	380.6	313.4	324.6	285.4	285.4	254.7	204.3
70°	215.5	218.3	257.5	293.8	235.1	125.9	221.1	221.1	198.7	190.3	173.5
72.5°	159.5	162.3	193.1	181.9	92.3	78.4	162.3	179.1	162.3	153.9	139.9
75°	117.6	120.3	100.8	42.0	39.2	50.4	95.1	123.1	117.6	114.7	106.4
77.5°	22.4	16.8	14.0	19.6	28.0	42.0	61.6	75.5	78.4	83.9	78.4
80°	2.8	2.8	8.4	16.8	30.8	44.7	64.3	72.7	75.5	78.4	72.7
82.5°	0.0	2.8	8.4	16.8	30.8	42.0	56.0	64.3	70.0	72.7	70.0
85°	0.0	2.8	5.6	14.0	25.1	30.8	28.0	19.6	16.8	19.6	14.0
87.5°	0.0	0.0	2.8	2.8	5.6	5.6	5.6	5.6	5.6	5.6	5.6
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°	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2	1763.2
2.5°	1785.5	1774.3	1735.2	1693.2	1656.8	1673.6	1656.8	1642.8	1648.4	1642.8	1637.2
5°	1883.5	1833.1	1749.1	1712.8	1682.0	1679.1	1670.8	1668.0	1670.8	1670.8	1645.6
7.5°	1975.8	1894.7	1805.1	1765.9	1729.5	1732.4	1712.8	1712.8	1709.9	1696.0	1690.3
10°	2115.8	2006.6	1891.8	1821.9	1777.1	1768.7	1749.1	1729.5	1729.5	1729.5	1701.6
12.5°	2269.7	2132.5	1975.8	1894.7	1841.5	1799.5	1768.7	1763.2	1732.4	1726.7	1712.8
15°	2404.0	2230.5	2031.8	1919.8	1852.7	1796.7	1749.1	1718.3	1704.4	1696.0	1684.8
17.5°	2535.5	2314.4	2062.6	1919.8	1847.1	1782.8	1732.4	1704.4	1670.8	1676.4	1654.0
20°	2711.9	2404.0	2071.0	1883.5	1793.9	1732.4	1665.2	1651.2	1631.6	1614.8	1620.4
22.5°	2882.6	2468.4	2045.8	1838.7	1709.9	1637.2	1603.6	1586.8	1578.4	1564.4	1544.8
25°	3036.5	2538.3	2006.6	1757.5	1620.4	1567.2	1536.4	1533.6	1514.1	1514.1	1477.6
27.5°	3193.2	2563.5	1939.4	1662.4	1542.1	1511.3	1497.2	1491.7	1483.3	1463.7	1438.4
30°	3372.3	2571.9	1841.5	1564.4	1472.1	1438.4	1458.0	1472.1	1435.7	1399.3	1410.5
32.5°	3520.7	2552.4	1724.0	1472.1	1421.7	1404.9	1444.1	1458.0	1416.1	1376.9	1357.3
35°	3699.7	2504.8	1609.2	1399.3	1371.3	1404.9	1438.4	1438.4	1354.5	1306.9	1295.7
37.5°	3971.2	2451.6	1502.9	1337.8	1318.2	1388.2	1432.9	1402.1	1270.6	1211.8	1197.8
40°	4262.3	2418.0	1399.3	1276.1	1290.2	1360.1	1385.3	1290.2	1155.8	1119.5	1108.3
42.5°	4684.9	2350.8	1306.9	1223.0	1264.9	1321.0	1321.0	1150.2	1099.9	1080.3	1077.5
45°	5211.0	2303.2	1225.8	1178.2	1228.6	1242.6	1197.8	1077.5	1041.1	1035.5	1038.3
47.5°	5468.5	2210.9	1141.8	1125.0	1161.4	1164.2	1046.7	1018.7	987.9	979.5	973.9
50°	5429.3	2045.8	1032.7	1055.1	1105.5	1077.5	954.4	959.9	931.9	929.1	915.2
52.5°	5155.1	1785.5	923.5	976.7	1032.7	951.5	878.8	873.1	873.1	836.8	822.8
55°	4570.2	1438.4	792.0	859.2	926.4	800.4	780.8	775.2	761.2	727.6	719.2
57.5°	3618.6	1055.1	596.1	668.8	786.4	680.0	677.3	652.1	615.7	590.5	590.5
60°	2152.1	607.3	375.0	408.6	520.6	551.4	612.9	601.7	540.2	501.0	489.8
62.5°	982.3	313.4	237.9	243.5	279.9	358.2	481.4	556.9	470.2	403.0	397.4
65°	330.3	232.3	195.9	187.5	193.1	215.5	288.3	394.6	375.0	310.7	299.5
67.5°	201.5	207.1	184.7	170.7	170.7	167.9	165.1	179.1	221.1	215.5	218.3
70°	173.5	190.3	170.7	153.9	148.4	139.9	117.6	98.0	83.9	98.0	103.5
72.5°	139.9	151.1	145.5	131.5	117.6	106.4	83.9	64.3	47.6	42.0	42.0
75°	103.5	111.9	117.6	100.8	89.6	75.5	61.6	42.0	25.1	16.8	16.8
77.5°	75.5	83.9	86.8	78.4	67.2	53.2	39.2	28.0	14.0	5.6	5.6
80°	64.3	75.5	83.9	78.4	70.0	50.4	36.4	19.6	11.2	2.8	2.8
82.5°	61.6	75.5	83.9	75.5	67.2	47.6	36.4	22.4	8.4	2.8	2.8
85°	14.0	19.6	25.1	30.8	36.4	36.4	28.0	16.8	8.4	2.8	2.8
87.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	2.8	2.8	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)