

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: P453732

Luminaire Tested: **GALN-SA4D-740-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453732  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4D-740-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30902 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

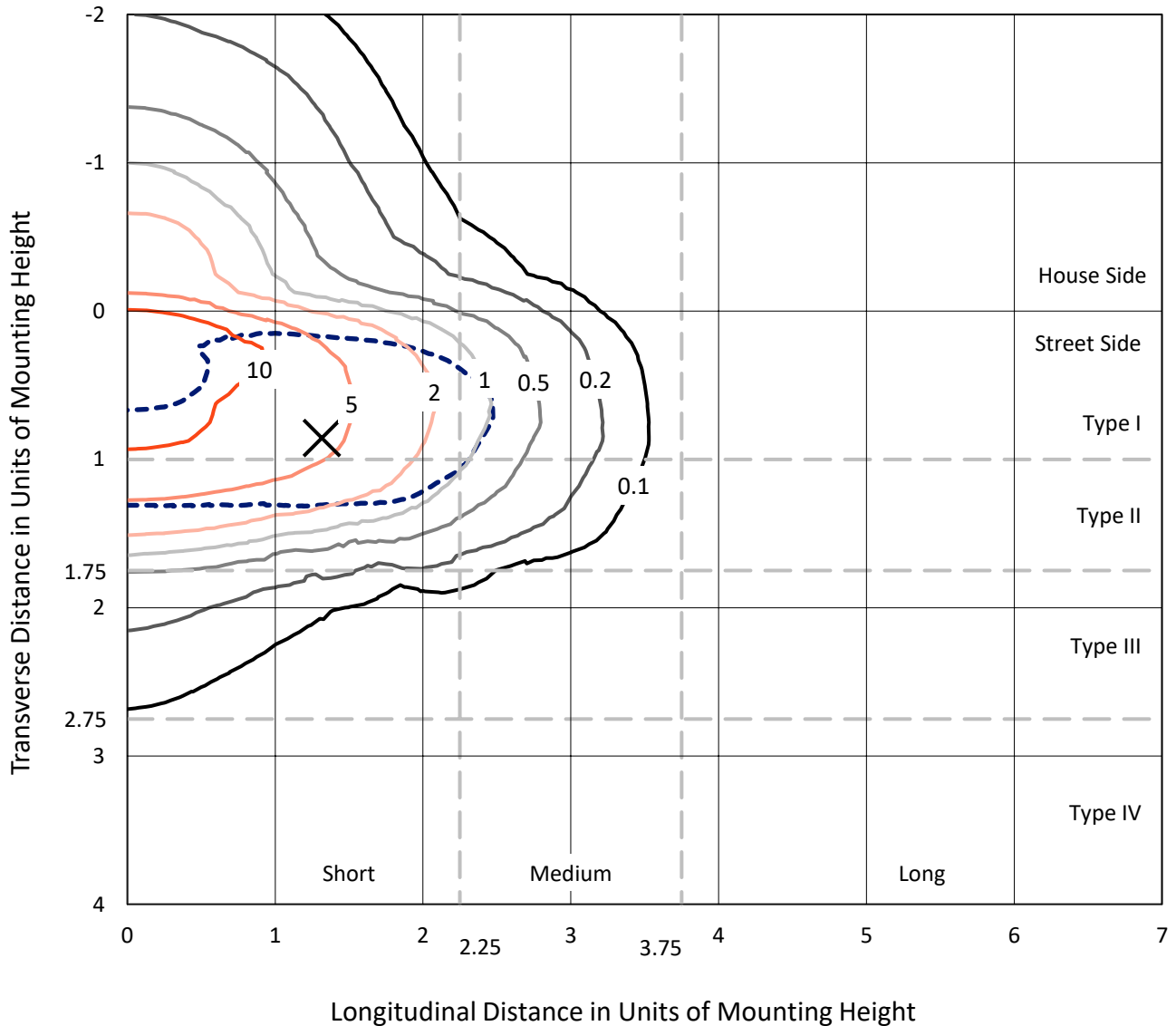
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

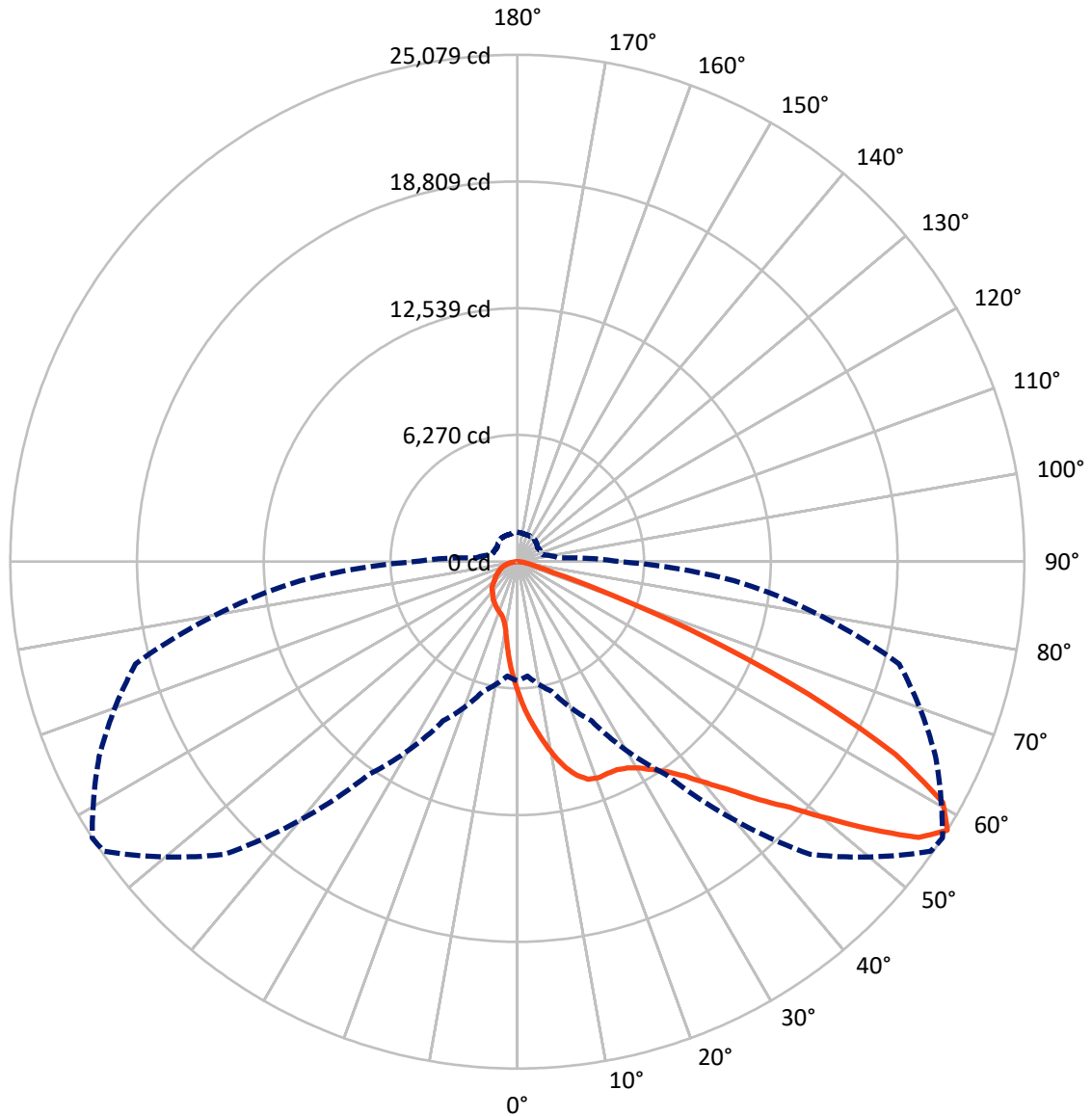
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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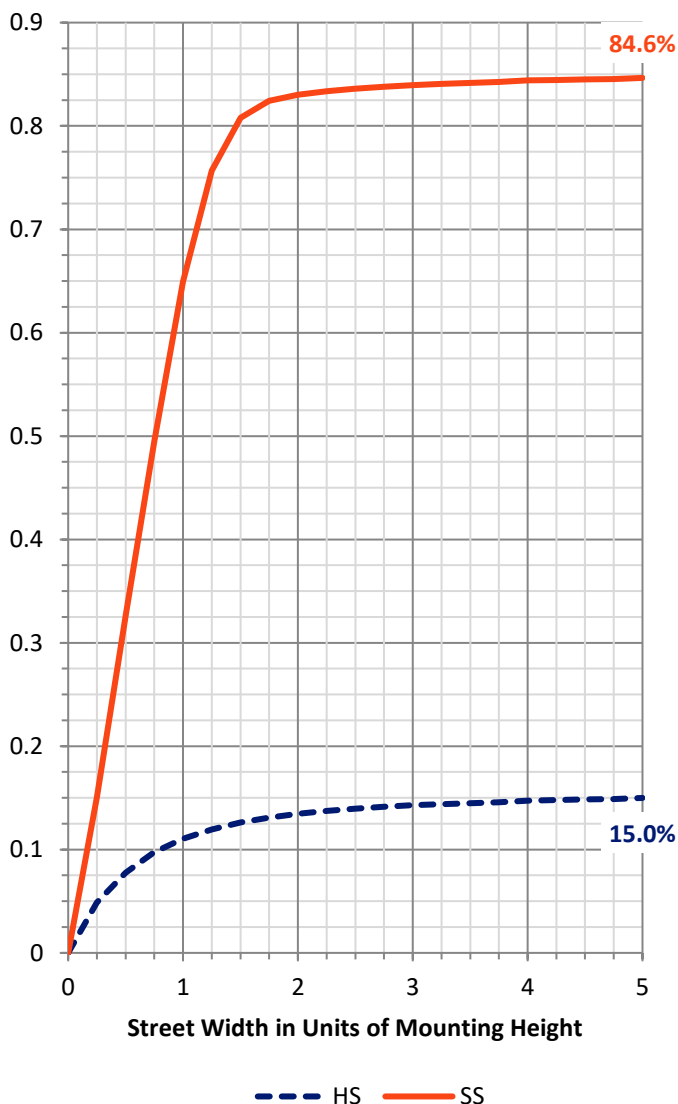
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4699.3	0.0	4699.3
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	26202.7	0.0	26202.7
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	30902.0	0.0	30902.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	624.0	2.0
10°-20°	1838.8	6.0
20°-30°	3053.4	9.9
30°-40°	4599.4	14.9
40°-50°	6905.5	22.3
50°-60°	7740.2	25.0
60°-70°	4529.9	14.7
70°-80°	1339.9	4.3
80°-90°	270.8	0.9
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°	30902.0	100.0
0°-180°	30902.0	100.0

**Coefficient of Utilization**



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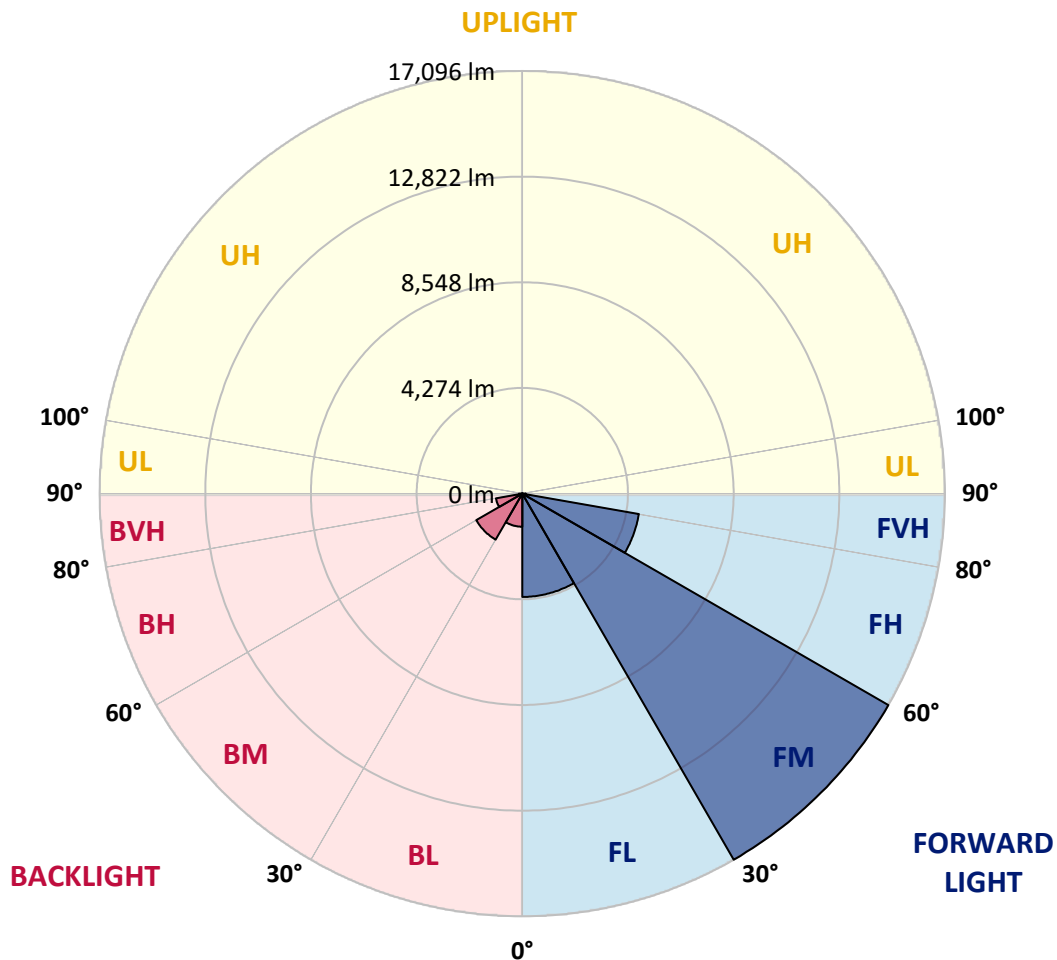
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4177.2	13.5			
FM	(30°-60°)	17096.3	55.3			
FH	(60°-80°)	4788.6	15.5			G2/5000
FVH	(80°-90°)	140.5	0.5			G2/225
BL	(0°-30°)	1339.0	4.3	B3/2500		
BM	(30°-60°)	2148.7	7.0	B2/2500		
BH	(60°-80°)	1081.3	3.5	B3/2500		G3/2500
BVH	(80°-90°)	130.3	0.4			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2
2.5°	8067.0	7979.0	7909.7	7848.8	7769.3	7554.4	7339.6	7336.2	7165.4	6901.5	6630.9
5°	9381.3	9262.9	9278.1	9088.7	8899.2	8588.0	8133.0	8109.3	7745.6	7251.7	6749.3
7.5°	10237.2	10238.9	10191.6	10083.3	9878.6	9525.1	9009.2	8892.5	8386.7	7637.3	6884.6
10°	10193.3	10238.9	10318.4	10411.5	10474.1	10299.8	9829.6	9687.5	9029.5	8104.2	7035.1
12.5°	9608.0	9679.0	9792.4	10025.8	10403.0	10690.6	10529.9	10414.9	9773.8	8569.4	7200.9
15°	9242.6	9284.9	9347.5	9504.8	9910.8	10599.2	11015.4	10954.5	10475.7	9095.4	7387.0
17.5°	9131.0	9173.3	9193.6	9290.0	9579.2	10284.6	11206.5	11314.8	11098.2	9579.2	7574.7
20°	9242.6	9262.9	9262.9	9320.4	9547.1	10100.2	11198.0	11416.2	11609.1	10159.4	7750.7
22.5°	9535.2	9543.7	9531.9	9552.2	9721.3	10151.0	11118.5	11389.2	12021.8	10651.7	7887.7
25°	10010.6	10024.1	9946.3	9898.9	10022.4	10374.3	11162.5	11411.2	12344.9	11121.9	7979.0
27.5°	10550.2	10567.1	10472.4	10362.4	10419.9	10650.0	11335.1	11558.3	12586.8	11585.4	8036.5
30°	11211.6	11218.3	11059.3	10927.4	10890.2	11061.0	11629.4	11837.4	12887.9	12131.8	8122.8
32.5°	11888.2	11938.9	11734.3	11548.2	11485.6	11538.0	12064.1	12265.4	13246.5	12718.7	8261.5
35°	12808.4	12816.8	12571.6	12344.9	12138.5	12206.2	12620.6	12766.1	13742.1	13397.1	8457.7
37.5°	13957.0	14034.8	13696.5	13273.6	13019.8	12921.7	13293.9	13452.9	14437.4	14229.3	8753.8
40°	15232.4	15261.1	14971.9	14708.0	14244.5	13960.3	14217.5	14390.0	15295.0	15222.2	9097.1
42.5°	16034.2	16096.8	16118.7	16091.7	15743.2	15266.2	15364.3	15445.5	16309.9	16154.3	9449.0
45°	16304.8	16397.9	16712.5	17379.0	17416.2	16945.9	16717.6	16795.4	17416.2	17094.8	9785.6
47.5°	15856.6	16015.6	16595.8	17962.5	18985.9	19021.4	18333.0	18162.1	18424.3	17874.6	10029.2
50°	14697.8	14731.7	15619.7	17598.9	19721.7	21005.6	20293.5	19975.5	19381.7	18451.4	10196.6
52.5°	12904.8	12943.7	13688.0	15909.0	19268.4	22392.7	22587.2	22018.9	20354.4	18899.7	10306.6
55°	9579.2	9804.2	10622.9	12769.5	17120.1	22262.4	24410.7	24087.6	21530.0	19254.9	10479.1
57.5°	5890.0	5683.6	6654.5	8687.8	12876.1	20472.8	24974.0	25078.9	22824.0	19552.6	10768.4
60°	2709.9	2750.5	3151.4	4480.9	7848.8	16015.6	23522.6	24185.7	23539.6	19542.4	10841.1
62.5°	1867.5	1830.3	1728.8	1967.3	3579.3	10129.0	19868.9	20992.1	22105.1	18935.2	10551.9
65°	1669.6	1632.3	1436.1	1370.2	1644.2	4414.9	14444.1	15861.6	18612.1	17402.6	9831.3
67.5°	1559.6	1508.9	1305.9	1177.3	1173.9	1757.5	8516.9	10223.7	13804.7	14713.1	8518.6
70°	1444.6	1404.0	1202.7	1060.6	999.7	1104.6	3743.4	4900.4	8963.5	10602.6	6635.9
72.5°	1329.6	1282.2	1101.2	949.0	869.5	827.2	1434.4	1865.8	5064.5	6356.8	4068.2
75°	1162.1	1138.4	984.5	859.3	773.0	668.2	910.1	1038.6	2422.3	2919.6	2041.7
77.5°	1016.6	991.2	874.5	751.0	688.5	543.0	646.2	705.4	1021.7	1184.1	921.9
80°	744.3	769.7	737.5	663.1	614.0	426.3	434.7	483.8	607.3	671.5	563.3
82.5°	471.9	519.3	568.4	510.8	465.2	336.6	301.1	319.7	414.4	439.8	250.3
85°	197.9	201.3	329.9	311.2	265.6	199.6	181.0	191.1	221.6	231.7	116.7
87.5°	76.1	74.4	116.7	108.3	82.9	57.5	57.5	64.3	88.0	81.2	37.2
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°	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2	6492.2
2.5°	6514.1	6394.0	6155.5	5859.5	5643.0	5399.4	5184.6	5030.7	4973.1	4946.1	4895.3
5°	6509.1	6272.3	5778.3	5260.7	4844.6	4418.3	4058.0	3824.6	3804.3	3648.7	3633.4
7.5°	6510.8	6148.8	5362.2	4601.0	3966.7	3530.3	3232.5	3154.7	3061.7	3038.0	3049.9
10°	6515.8	5991.5	4915.6	3948.1	3334.0	3048.2	2936.5	2906.1	2909.5	2919.6	2921.3
12.5°	6522.6	5839.2	4452.2	3452.4	2978.8	2860.4	2848.6	2875.6	2904.4	2926.4	2931.5
15°	6531.1	5665.0	4000.5	3053.2	2801.2	2791.1	2830.0	2875.6	2916.2	2948.4	2953.4
17.5°	6520.9	5462.0	3621.6	2808.0	2703.1	2752.1	2816.4	2873.9	2911.2	2941.6	2945.0
20°	6497.2	5235.3	3256.2	2635.4	2642.2	2721.7	2791.1	2845.2	2885.8	2901.0	2912.8
22.5°	6405.9	4964.7	2938.2	2501.8	2569.5	2679.4	2762.3	2794.4	2748.8	2716.6	2725.1
25°	6250.3	4612.8	2642.2	2393.5	2503.5	2620.2	2704.8	2627.0	2589.8	2576.2	2583.0
27.5°	6055.7	4227.2	2418.9	2280.2	2418.9	2554.2	2530.6	2517.0	2500.1	2478.1	2483.2
30°	5846.0	3850.0	2229.5	2192.2	2327.6	2405.4	2415.5	2437.5	2418.9	2385.1	2398.6
32.5°	5651.5	3494.7	2085.7	2117.8	2263.3	2251.4	2327.6	2352.9	2266.7	2153.3	2158.4
35°	5485.7	3164.9	1977.4	2045.1	2153.3	2158.4	2234.5	2146.6	2053.5	1999.4	2002.8
37.5°	5360.5	2907.8	1906.4	1982.5	2012.9	2077.2	2036.6	1991.0	1979.1	1941.9	1943.6
40°	5286.1	2682.8	1860.7	1933.4	1928.4	1972.3	1842.1	1887.8	1904.7	1892.8	1894.5
42.5°	5211.7	2523.8	1813.3	1865.8	1864.1	1777.8	1749.1	1788.0	1831.9	1837.0	1833.6
45°	5152.5	2400.3	1764.3	1762.6	1796.4	1661.1	1652.6	1676.3	1738.9	1769.4	1767.7
47.5°	5086.5	2297.1	1689.9	1642.5	1652.6	1588.4	1574.8	1585.0	1661.1	1710.2	1723.7
50°	5003.6	2193.9	1596.8	1532.5	1490.3	1520.7	1524.1	1525.8	1601.9	1657.7	1669.6
52.5°	4937.6	2116.1	1490.3	1442.9	1392.1	1459.8	1485.2	1488.6	1534.2	1579.9	1588.4
55°	4976.5	2072.1	1385.4	1351.5	1305.9	1397.2	1446.3	1453.0	1463.2	1497.0	1502.1
57.5°	5093.2	2082.3	1300.8	1256.8	1223.0	1322.8	1405.7	1410.8	1404.0	1444.6	1451.3
60°	5128.8	2077.2	1238.2	1151.9	1131.6	1243.3	1346.5	1356.6	1354.9	1414.1	1426.0
62.5°	4979.9	2012.9	1175.6	1064.0	1050.5	1162.1	1263.6	1304.2	1312.6	1397.2	1412.4
65°	4629.8	1881.0	1092.7	970.9	970.9	1075.8	1184.1	1239.9	1263.6	1376.9	1393.8
67.5°	4168.0	1725.4	1008.2	891.4	888.1	992.9	1099.5	1157.0	1194.2	1348.2	1358.3
70°	3459.2	1515.6	903.3	805.2	805.2	899.9	996.3	1065.7	1119.8	1294.0	1294.0
72.5°	2369.9	1260.2	776.4	707.1	708.8	796.7	894.8	972.6	1036.9	1185.8	1189.2
75°	1498.7	984.5	637.7	602.2	609.0	691.8	793.3	874.5	1003.1	1172.2	1177.3
77.5°	796.7	691.8	507.5	499.0	507.5	583.6	696.9	808.6	1006.5	1016.6	999.7
80°	515.9	490.5	400.9	384.0	387.4	470.3	620.8	768.0	808.6	818.7	781.5
82.5°	280.8	311.2	284.2	267.3	267.3	367.1	529.5	610.6	580.2	482.1	460.1
85°	120.1	145.5	147.2	128.6	123.5	226.7	355.2	333.2	309.6	296.0	292.6
87.5°	33.8	47.4	47.4	35.5	27.1	62.6	71.0	20.3	0.0	1.7	3.4
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)