

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: P647372

Luminaire Tested: **GALN-SA4D-835-U-AFL-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647372  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-835-U-AFL-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17875.1 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

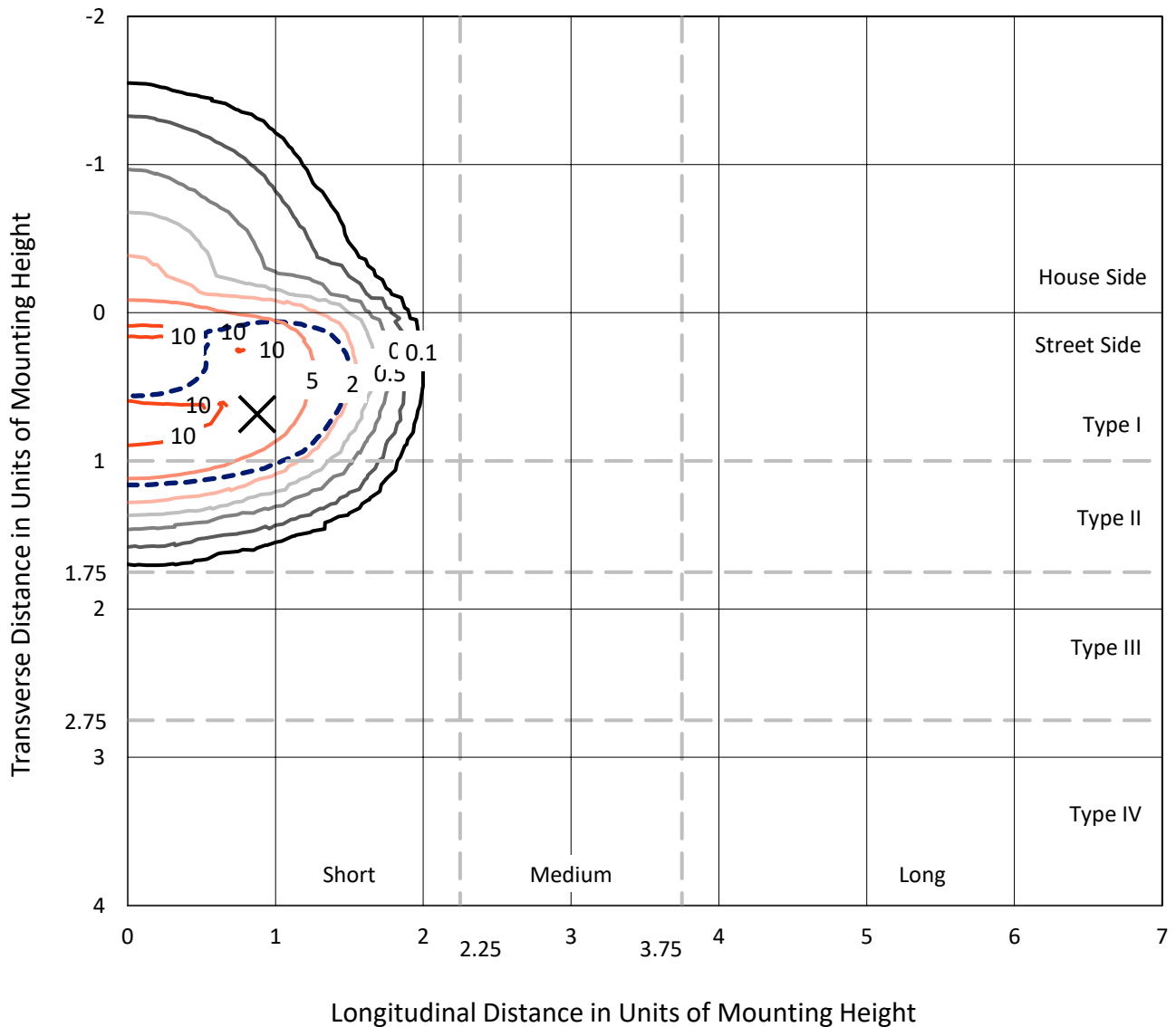
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

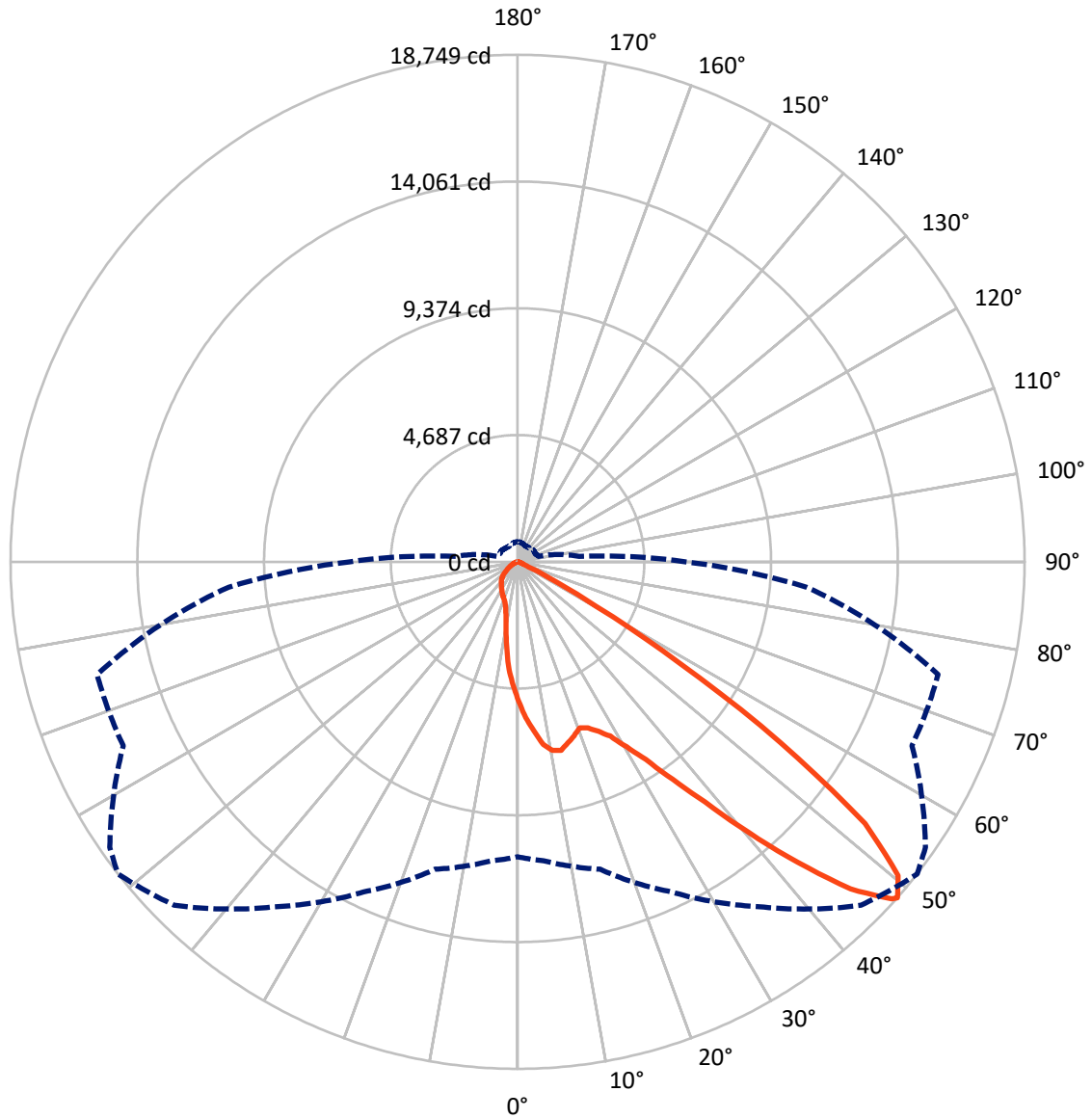
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral      - - - Horizontal Cone Through 48-Deg Vertical

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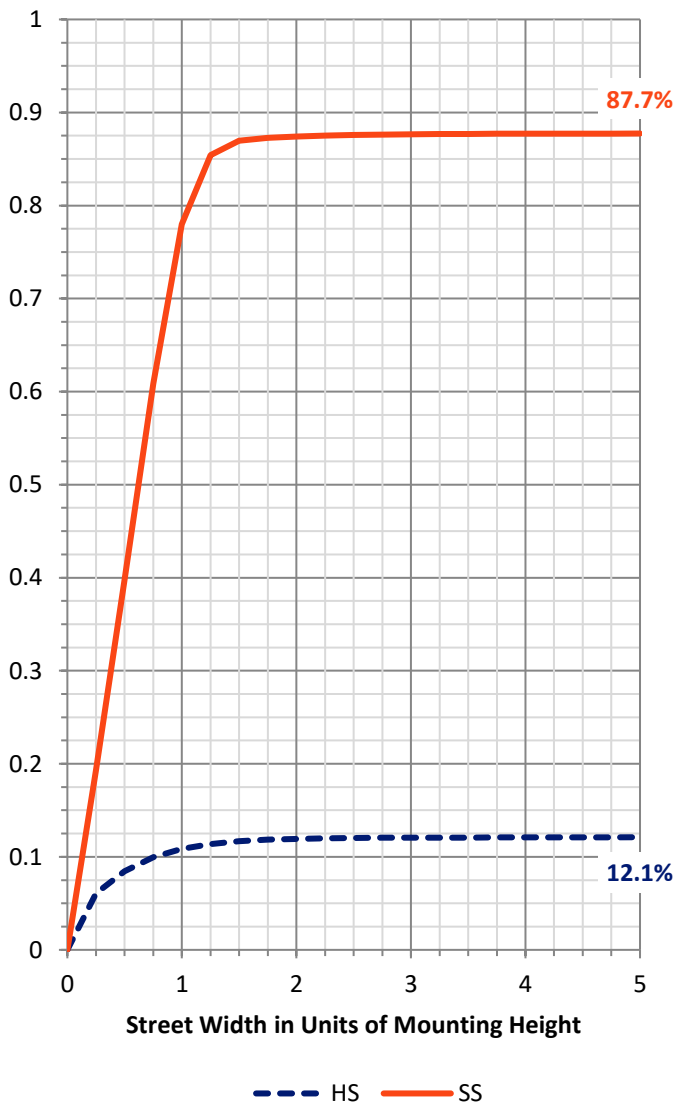
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2176.4	0.0	2176.4
	% Fixture	12.2	0.0	12.2
<b>Street Side</b>	Lumens	15698.7	0.0	15698.7
	% Fixture	87.8	0.0	87.8
<b>Total</b>	Lumens	17875.1	0.0	17875.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	472.5	2.6
10°-20°	1234.7	6.9
20°-30°	2108.2	11.8
30°-40°	3882.3	21.7
40°-50°	6029.2	33.7
50°-60°	3628.5	20.3
60°-70°	419.7	2.3
70°-80°	81.2	0.5
80°-90°	18.8	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°	17875.1	100.0
0°-180°	17875.1	100.0

**Coefficient of Utilization**

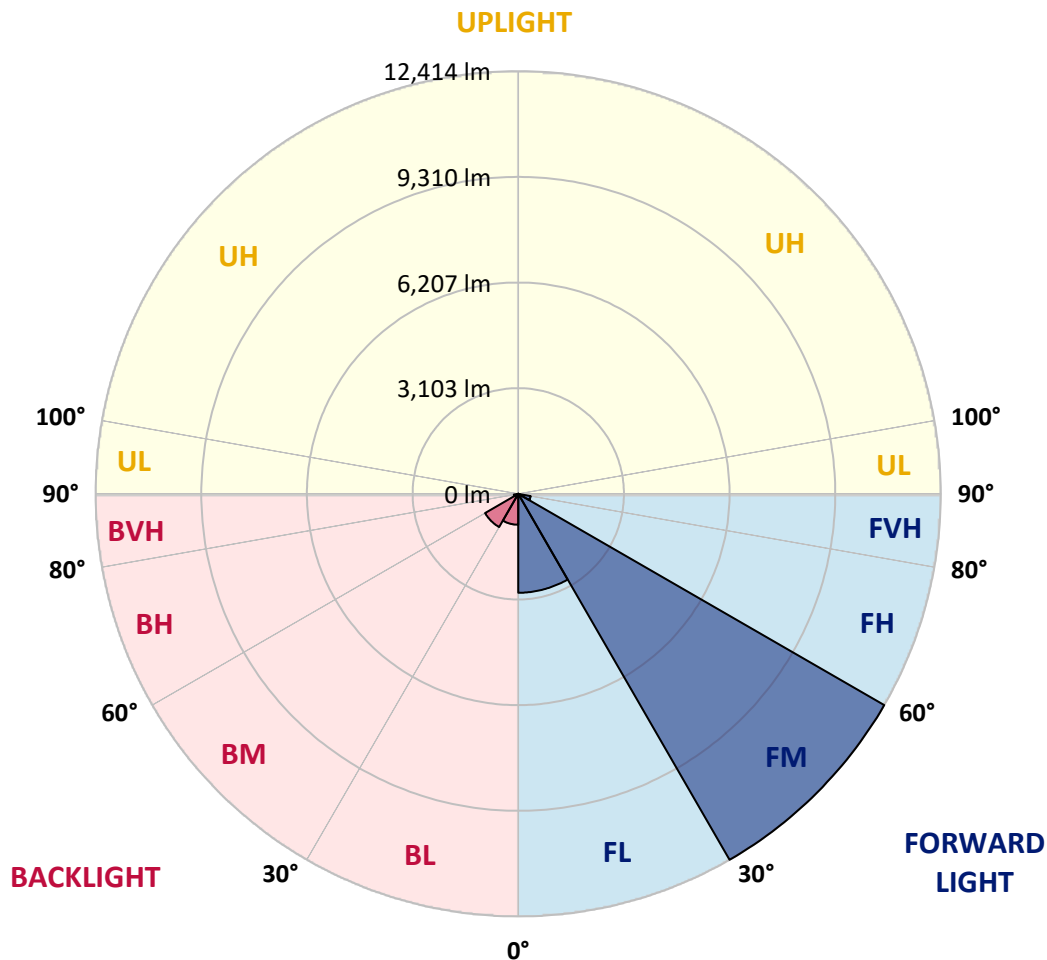


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2906.3	16.3			
FM (30°-60°)	12413.9	69.4			
FH (60°-80°)	369.6	2.1			G0/660
FVH (80°-90°)	8.9	0.1			G0/10
BL (0°-30°)	909.2	5.1	B2/1000		
BM (30°-60°)	1126.1	6.3	B2/2500		
BH (60°-80°)	131.3	0.7	B1/500		G1/500
BVH (80°-90°)	9.8	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	52°	55°	65°	75°	85°
0°	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0
2.5°	6256.5	6113.1	6126.2	6032.4	5977.7	5889.0	5769.1	5745.7	5615.4	5438.2	5258.5
5°	6819.3	6785.4	6829.7	6694.3	6699.4	6553.6	6272.1	6277.3	5977.7	5688.4	5409.6
7.5°	6855.8	6777.6	6821.9	6941.8	7012.2	6986.1	6827.1	6689.0	6405.0	5980.2	5573.7
10°	6139.2	6287.7	6334.6	6532.6	6814.1	7111.1	7092.9	7100.7	6863.6	6308.6	5714.5
12.5°	5709.2	5610.2	5769.1	5889.0	6313.8	6889.7	7152.9	7210.2	7228.4	6626.5	5855.2
15°	5513.8	5513.8	5539.9	5573.7	5881.2	6412.8	6949.6	7116.4	7509.8	7043.4	6076.6
17.5°	5636.3	5631.1	5667.6	5597.2	5711.8	6120.9	6762.0	6952.2	7825.1	7452.5	6251.2
20°	6008.9	6027.1	6003.7	5800.5	5808.3	6115.8	6553.6	6853.2	8038.8	7806.9	6483.2
22.5°	6527.5	6537.9	6405.0	6183.5	6118.4	6269.5	6673.4	6902.7	8210.8	8231.6	6553.6
25°	7126.8	7085.1	7059.1	6746.3	6548.3	6678.6	6944.3	7077.3	8317.7	8596.5	6754.2
27.5°	7958.0	7874.6	7715.7	7436.9	7291.0	7106.0	7296.2	7515.1	8622.5	9107.2	6973.0
30°	9185.4	9112.4	8802.3	8442.7	8059.7	7877.2	7937.2	8057.1	9172.3	9698.7	7262.3
32.5°	11032.9	10879.1	10430.9	9745.6	9224.4	8721.5	8705.9	8833.6	9664.8	10516.9	7606.2
35°	13068.0	13021.1	12361.8	11655.6	10647.2	9870.7	9883.7	9951.5	10608.1	11590.4	8057.1
37.5°	14420.4	14678.3	14258.8	13500.5	12653.6	11543.5	11262.1	11285.6	11903.2	12862.1	8870.1
40°	15465.3	15246.3	15295.9	15118.7	14540.2	13784.6	13161.8	13039.3	13401.5	14269.2	9677.8
42.5°	15009.2	15019.7	15324.6	15744.1	15887.4	15832.7	15196.9	14964.9	14683.5	15421.0	10446.6
45°	13722.0	13990.4	14386.5	15496.5	16471.1	17385.7	17260.6	16875.0	15569.5	16333.0	10889.5
47.5°	11668.7	11658.2	12307.0	13750.7	15916.0	18058.0	18626.1	18355.1	16197.5	16231.4	10798.4
48°	10910.4	11098.0	11767.6	13466.7	15564.2	17959.0	18748.5	18407.2	16090.6	16095.8	10720.1
50°	8064.9	8031.0	8864.8	10949.5	13901.8	16875.0	18232.5	18498.4	16088.1	15410.5	10173.0
52.5°	4260.5	4406.3	5013.5	6884.4	9829.0	13810.6	16082.8	16497.1	15520.0	14290.1	9386.0
55°	1811.0	1636.4	2102.8	3108.7	5529.5	9227.0	11798.9	12721.4	13122.7	12645.8	8210.8
57.5°	646.2	706.2	813.0	1170.0	2324.3	5050.0	7035.6	7752.2	9091.6	9279.2	5594.6
60°	414.3	422.1	456.0	536.8	873.0	1946.5	3338.0	3908.7	4515.8	4661.7	2611.0
62.5°	320.5	323.1	338.7	351.8	414.3	755.7	1253.3	1485.3	1542.6	1326.3	685.3
65°	268.4	271.0	276.2	276.2	294.5	354.4	437.8	482.1	469.0	463.8	388.3
67.5°	205.9	211.1	221.5	221.5	231.9	216.3	242.3	258.0	291.8	354.4	330.9
70°	161.5	164.2	171.9	177.2	177.2	156.4	174.6	190.2	213.7	263.2	260.6
72.5°	125.0	130.3	135.5	135.5	127.7	106.8	125.0	138.1	153.7	182.4	177.2
75°	96.4	96.4	99.0	80.8	62.6	54.7	75.6	91.2	114.6	119.9	99.0
77.5°	26.1	28.7	26.1	23.5	26.1	39.1	49.5	57.3	73.0	73.0	65.1
80°	0.0	2.6	7.8	15.7	26.1	36.5	44.3	49.5	57.3	62.6	59.9
82.5°	0.0	2.6	7.8	15.7	23.5	28.7	39.1	41.7	46.9	54.7	54.7
85°	0.0	2.6	5.2	10.4	15.7	18.2	18.2	15.7	15.7	13.0	10.4
87.5°	0.0	0.0	2.6	5.2	5.2	7.8	7.8	7.8	7.8	7.8	7.8
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°	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0	5162.0
2.5°	5188.1	5107.3	4984.8	4792.0	4607.0	4487.1	4372.5	4244.8	4174.4	4169.2	4130.2
5°	5250.6	5068.2	4776.4	4445.5	4091.1	3786.2	3478.7	3278.0	3098.3	2999.3	2981.0
7.5°	5284.5	5047.4	4575.8	4020.7	3416.2	2918.5	2574.5	2321.8	2222.7	2149.7	2147.1
10°	5354.9	5010.9	4276.0	3457.9	2710.0	2207.1	1969.9	1855.3	1800.6	1779.8	1748.4
12.5°	5407.0	4943.2	3968.6	2879.4	2142.0	1829.2	1725.0	1699.0	1701.5	1712.0	1699.0
15°	5479.9	4883.2	3554.3	2363.4	1798.0	1646.9	1646.9	1652.1	1688.5	1693.8	1691.1
17.5°	5474.7	4766.0	3126.9	1946.5	1589.5	1568.7	1576.5	1626.0	1649.5	1657.3	1639.1
20°	5537.3	4656.5	2686.6	1662.5	1472.3	1503.5	1555.7	1568.7	1597.3	1602.6	1581.7
22.5°	5519.1	4382.9	2277.4	1438.4	1383.6	1443.6	1495.7	1511.3	1503.5	1487.9	1485.3
25°	5485.1	4148.4	1902.2	1289.8	1318.5	1383.6	1433.2	1404.5	1388.9	1391.5	1394.1
27.5°	5425.3	3851.3	1592.2	1185.6	1229.9	1326.3	1323.7	1313.3	1328.9	1315.9	1328.9
30°	5414.8	3554.3	1336.7	1091.8	1164.8	1235.1	1240.4	1258.6	1276.8	1253.3	1276.8
32.5°	5430.4	3228.5	1154.4	1034.5	1125.7	1128.3	1185.6	1203.9	1190.9	1138.7	1144.0
35°	5550.3	2978.4	1021.4	1003.3	1063.2	1065.7	1120.5	1097.1	1039.7	1008.4	1026.7
37.5°	5803.0	2769.9	958.9	974.5	979.8	1013.7	1016.3	969.4	974.5	971.9	982.4
40°	6126.2	2611.0	914.6	948.5	943.3	966.8	873.0	899.0	922.5	930.3	935.5
42.5°	6347.6	2496.4	886.0	906.8	896.4	854.7	802.6	828.6	846.9	875.6	880.7
45°	6446.7	2405.1	852.1	833.8	833.8	758.3	737.4	742.7	784.3	815.6	810.4
47.5°	6285.1	2316.5	792.2	737.4	755.7	693.1	669.7	669.7	714.0	753.1	745.3
48°	6222.6	2280.0	794.7	716.6	729.6	682.7	659.3	654.0	703.5	740.0	740.0
50°	5912.5	2144.6	727.0	659.3	633.2	628.0	612.4	617.6	648.9	682.7	682.7
52.5°	5308.0	1852.7	615.0	565.5	518.6	549.8	557.7	547.2	562.8	594.1	591.5
55°	4429.8	1422.8	492.5	469.0	432.5	466.4	482.1	469.0	453.4	476.8	476.8
57.5°	2837.7	766.1	393.5	398.7	362.2	396.0	409.1	377.9	349.1	367.4	364.8
60°	1279.4	458.6	323.1	315.3	291.8	330.9	351.8	315.3	276.2	289.2	302.2
62.5°	479.4	325.7	244.9	239.8	234.5	271.0	281.4	252.8	213.7	221.5	224.1
65°	351.8	286.7	195.4	177.2	187.6	213.7	208.4	179.8	153.7	153.7	158.9
67.5°	299.7	250.2	158.9	138.1	138.1	140.7	130.3	114.6	106.8	112.0	117.3
70°	234.5	198.0	125.0	106.8	96.4	86.0	75.6	73.0	65.1	73.0	70.4
72.5°	151.1	132.9	96.4	80.8	73.0	59.9	49.5	46.9	39.1	36.5	36.5
75°	80.8	80.8	75.6	65.1	57.3	46.9	39.1	31.2	20.8	15.7	15.7
77.5°	57.3	62.6	67.7	62.6	52.1	39.1	31.2	20.8	10.4	5.2	5.2
80°	54.7	62.6	67.7	59.9	52.1	39.1	28.7	15.7	7.8	2.6	2.6
82.5°	49.5	57.3	62.6	54.7	46.9	33.9	26.1	15.7	7.8	2.6	2.6
85°	10.4	13.0	15.7	15.7	18.2	23.5	18.2	13.0	5.2	2.6	2.6
87.5°	7.8	7.8	7.8	7.8	7.8	7.8	5.2	5.2	2.6	2.6	2.6
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)