

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: P651885

Luminaire Tested: **GALN-SA5A-840-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651885
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-SA5A-840-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19448.9 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

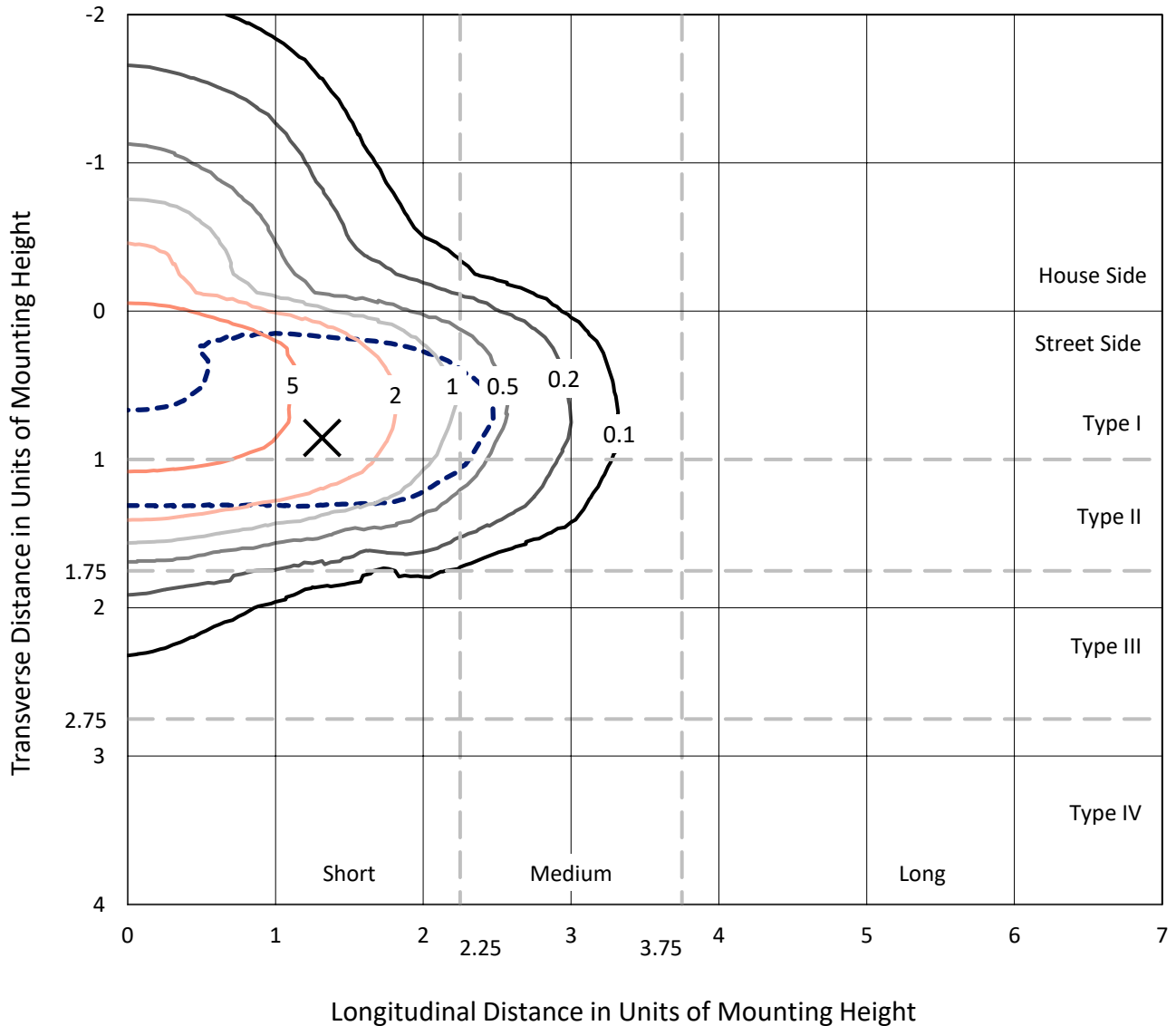
Input Watts (W): 154
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

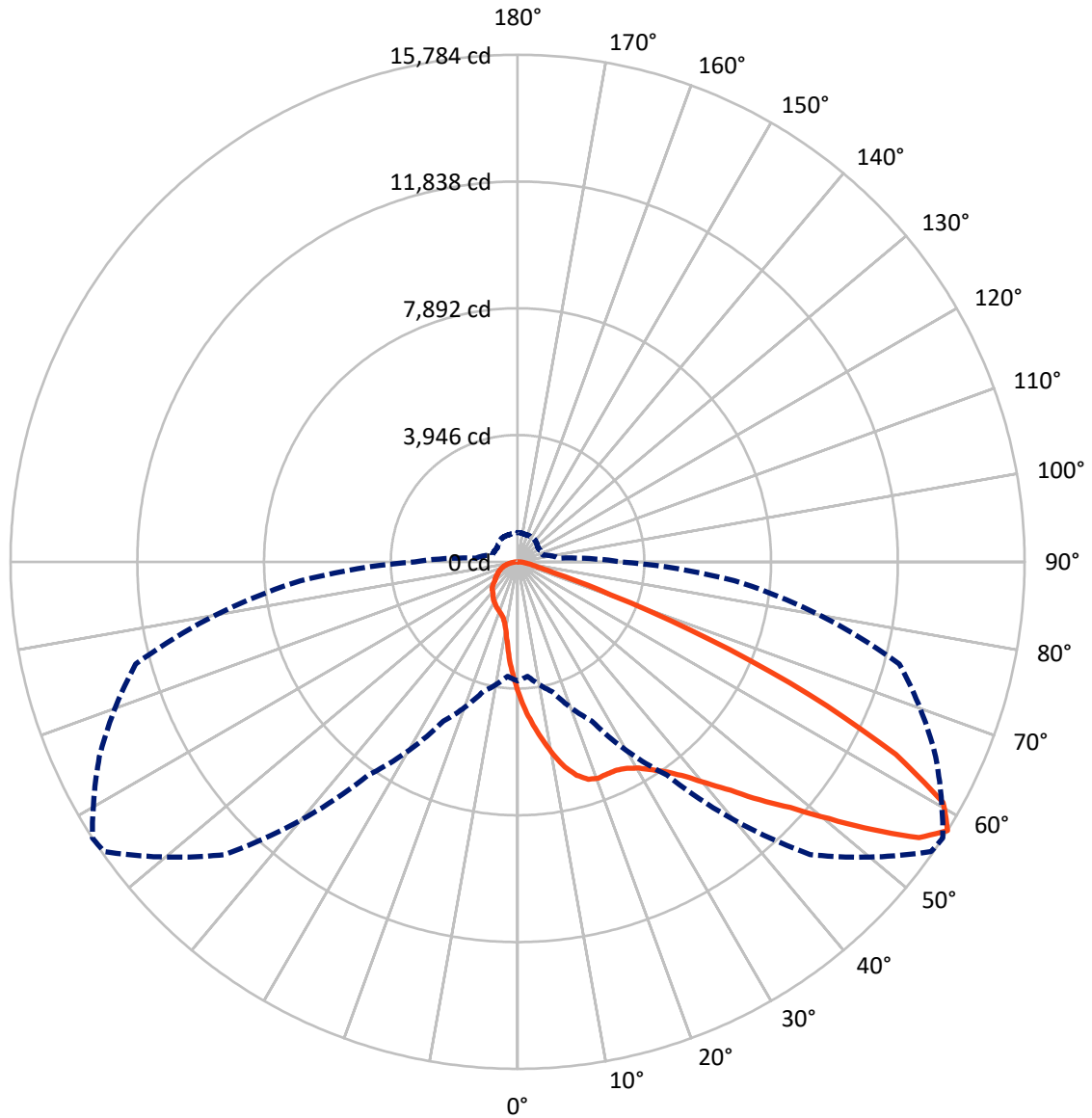
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 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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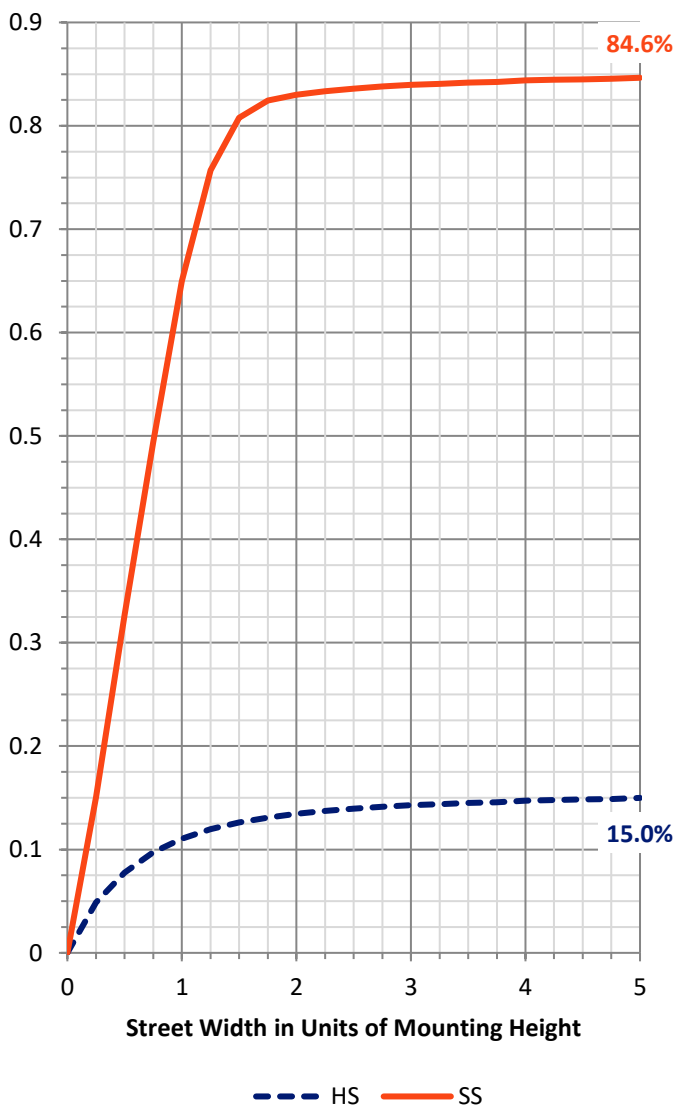
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2957.6	0.0	2957.6
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	16491.3	0.0	16491.3
	% Fixture	84.8	0.0	84.8
Total	Lumens	19448.9	0.0	19448.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	392.7	2.0
10°-20°	1157.3	6.0
20°-30°	1921.8	9.9
30°-40°	2894.7	14.9
40°-50°	4346.1	22.3
50°-60°	4871.5	25.0
60°-70°	2851.0	14.7
70°-80°	843.3	4.3
80°-90°	170.4	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°	19448.9	100.0
0°-180°	19448.9	100.0

Coefficient of Utilization



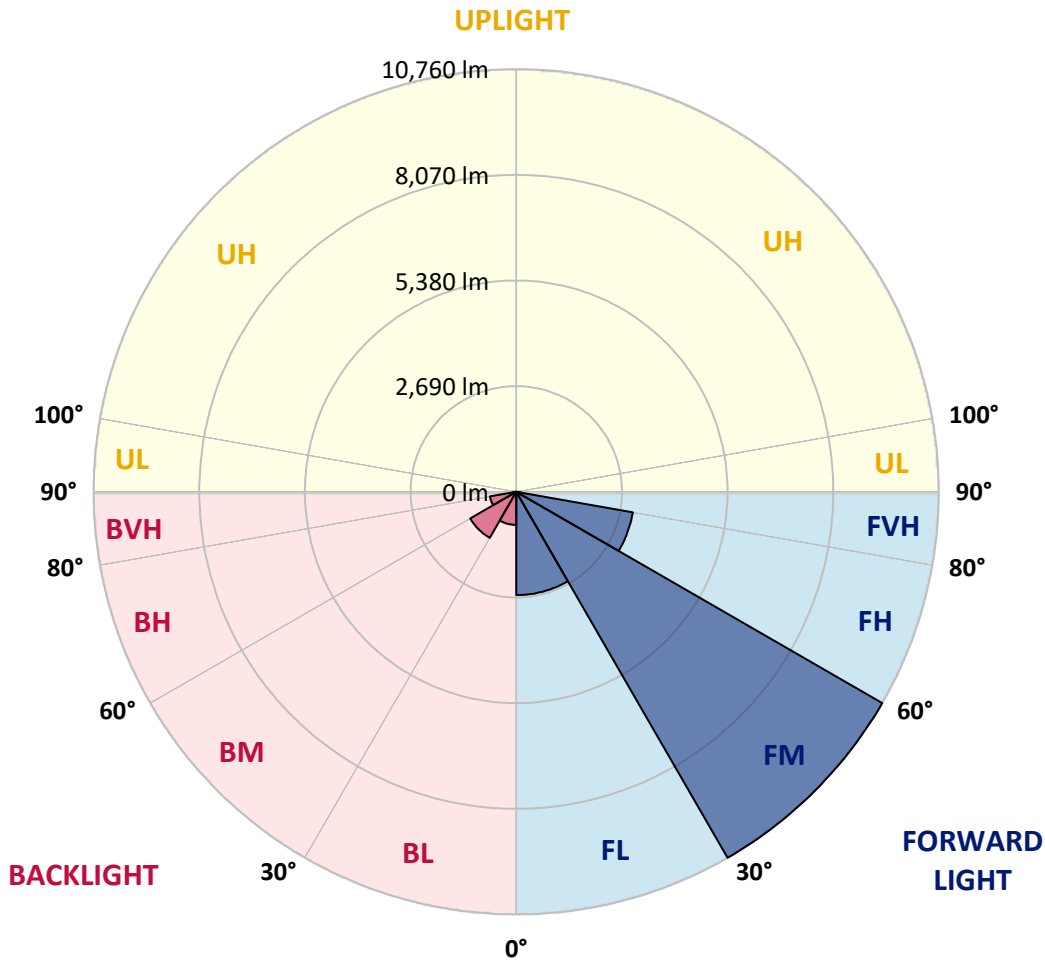
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2629.1	13.5			
FM (30°-60°)	10760.0	55.3			
FH (60°-80°)	3013.8	15.5			G2/5000
FVH (80°-90°)	88.4	0.5			G1/100
BL (0°-30°)	842.7	4.3	B2/1000		
BM (30°-60°)	1352.3	7.0	B2/2500		
BH (60°-80°)	680.5	3.5	B2/1000		G2/1000
BVH (80°-90°)	82.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0
2.5°	5077.2	5021.8	4978.1	4939.9	4889.8	4754.6	4619.4	4617.3	4509.7	4343.7	4173.3
5°	5904.4	5829.8	5839.4	5720.2	5601.0	5405.1	5118.7	5103.8	4874.9	4564.0	4247.8
7.5°	6443.1	6444.2	6414.3	6346.2	6217.3	5994.9	5670.2	5596.7	5278.4	4806.7	4333.0
10°	6415.4	6444.2	6494.2	6552.7	6592.1	6482.4	6186.5	6097.1	5683.0	5100.6	4427.8
12.5°	6047.0	6091.8	6163.1	6310.0	6547.4	6728.4	6627.2	6554.8	6151.3	5393.3	4532.1
15°	5817.1	5843.7	5883.0	5982.1	6237.6	6670.9	6932.8	6894.4	6593.2	5724.4	4649.2
17.5°	5746.8	5773.5	5786.2	5846.9	6029.0	6472.8	7053.1	7121.3	6984.9	6029.0	4767.4
20°	5817.1	5829.8	5829.8	5866.1	6008.7	6356.9	7047.7	7185.1	7306.4	6394.1	4878.1
22.5°	6001.3	6006.6	5999.1	6011.9	6118.4	6388.7	6997.7	7168.1	7566.2	6703.9	4964.3
25°	6300.4	6308.9	6260.0	6230.1	6307.8	6529.3	7025.4	7181.9	7769.6	6999.9	5021.8
27.5°	6640.0	6650.7	6591.1	6521.9	6558.0	6702.9	7134.0	7274.6	7921.8	7291.6	5058.0
30°	7056.3	7060.5	6960.5	6877.4	6854.0	6961.5	7319.2	7450.2	8111.4	7635.4	5112.3
32.5°	7482.1	7514.1	7385.2	7268.2	7228.7	7261.8	7592.9	7719.5	8337.0	8004.9	5199.6
35°	8061.3	8066.6	7912.2	7769.6	7639.7	7682.3	7943.1	8034.7	8648.9	8431.8	5323.1
37.5°	8784.2	8833.1	8620.2	8354.1	8194.4	8132.6	8366.9	8466.9	9086.5	8955.6	5509.4
40°	9586.9	9605.0	9422.9	9256.9	8965.1	8786.3	8948.2	9056.7	9626.3	9580.5	5725.5
42.5°	10091.5	10130.9	10144.7	10127.7	9908.4	9608.2	9669.9	9721.0	10265.1	10167.1	5947.0
45°	10261.9	10320.4	10518.5	10937.9	10961.3	10665.3	10521.6	10570.6	10961.3	10759.0	6158.8
47.5°	9979.7	10079.8	10445.0	11305.1	11949.3	11971.6	11538.4	11430.8	11595.8	11249.8	6312.1
50°	9250.5	9271.8	9830.7	11076.3	12412.4	13220.4	12772.3	12572.1	12198.4	11612.9	6417.5
52.5°	8122.0	8146.4	8614.9	10012.7	12127.1	14093.4	14215.8	13858.2	12810.5	11895.0	6486.7
55°	6029.0	6170.5	6685.8	8036.8	10775.0	14011.5	15363.5	15160.2	13550.4	12118.6	6595.3
57.5°	3707.0	3577.1	4188.2	5467.8	8103.9	12885.0	15718.0	15784.1	14364.9	12305.9	6777.4
60°	1705.5	1731.0	1983.4	2820.2	4939.9	10079.8	14804.5	15221.9	14815.2	12299.5	6823.1
62.5°	1175.3	1151.9	1088.0	1238.1	2252.7	6374.9	12505.0	13211.9	13912.4	11917.3	6641.1
65°	1050.7	1027.4	903.8	862.4	1034.9	2778.7	9090.8	9982.9	11714.0	10952.8	6187.6
67.5°	981.6	949.7	821.9	741.0	738.8	1106.2	5360.4	6434.6	8688.4	9260.1	5361.5
70°	909.2	883.6	757.0	667.5	629.2	695.2	2356.0	3084.2	5641.4	6673.0	4176.5
72.5°	836.8	806.9	693.1	597.3	547.2	520.6	902.8	1174.3	3187.5	4000.8	2560.4
75°	731.4	716.4	619.6	540.8	486.5	420.5	572.8	653.7	1524.6	1837.5	1285.0
77.5°	639.8	623.9	550.4	472.7	433.3	341.8	406.7	444.0	643.0	745.2	580.2
80°	468.4	484.4	464.1	417.3	386.4	268.3	273.6	304.4	382.2	422.7	354.5
82.5°	297.0	326.8	357.7	321.5	292.8	211.8	189.5	201.3	260.8	276.8	157.6
85°	124.6	126.7	207.6	195.9	167.1	125.6	114.0	120.3	139.4	145.8	73.4
87.5°	47.9	46.8	73.4	68.1	52.1	36.2	36.2	40.5	55.3	51.1	23.4
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°	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0	4086.0
2.5°	4099.9	4024.3	3874.2	3687.9	3551.5	3398.2	3263.1	3166.2	3129.9	3113.0	3081.0
5°	4096.7	3947.6	3636.7	3310.9	3049.0	2780.8	2554.0	2407.1	2394.3	2296.4	2286.8
7.5°	4097.7	3869.9	3374.8	2895.7	2496.5	2221.8	2034.5	1985.5	1927.0	1912.0	1919.5
10°	4100.9	3770.9	3093.8	2484.8	2098.4	1918.4	1848.2	1829.0	1831.1	1837.5	1838.6
12.5°	4105.2	3675.1	2802.0	2172.9	1874.8	1800.2	1792.8	1809.8	1827.9	1841.8	1845.0
15°	4110.5	3565.4	2517.8	1921.6	1763.0	1756.6	1781.1	1809.8	1835.4	1855.7	1858.9
17.5°	4104.1	3437.7	2279.4	1767.3	1701.3	1732.1	1772.6	1808.8	1832.2	1851.4	1853.5
20°	4089.2	3295.0	2049.3	1658.7	1662.9	1712.9	1756.6	1790.7	1816.2	1825.8	1833.3
22.5°	4031.7	3124.7	1849.3	1574.6	1617.2	1686.4	1738.5	1758.8	1730.0	1709.8	1715.1
25°	3933.8	2903.2	1662.9	1506.4	1575.6	1649.1	1702.4	1653.3	1629.9	1621.4	1625.7
27.5°	3811.3	2660.5	1522.4	1435.1	1522.4	1607.6	1592.7	1584.2	1573.5	1559.6	1562.8
30°	3679.3	2423.1	1403.2	1379.7	1464.9	1513.9	1520.3	1534.2	1522.4	1501.1	1509.6
32.5°	3556.9	2199.5	1312.6	1332.9	1424.5	1417.0	1464.9	1480.9	1426.6	1355.3	1358.5
35°	3452.6	1991.9	1244.5	1287.2	1355.3	1358.5	1406.3	1351.0	1292.4	1258.4	1260.5
37.5°	3373.8	1830.1	1199.9	1247.7	1266.9	1307.3	1281.8	1253.1	1245.6	1222.1	1223.2
40°	3326.9	1688.5	1171.1	1216.8	1213.6	1241.3	1159.4	1188.1	1198.8	1191.3	1192.4
42.5°	3280.1	1588.4	1141.2	1174.3	1173.2	1119.0	1100.8	1125.3	1153.0	1156.2	1154.0
45°	3242.8	1510.7	1110.4	1109.4	1130.6	1045.4	1040.1	1055.0	1094.4	1113.6	1112.6
47.5°	3201.3	1445.8	1063.5	1033.8	1040.1	999.7	991.1	997.5	1045.4	1076.3	1084.8
50°	3149.1	1380.8	1005.0	964.5	938.0	957.1	959.2	960.3	1008.2	1043.3	1050.7
52.5°	3107.6	1331.8	938.0	908.1	876.2	918.8	934.8	936.9	965.6	994.3	999.7
55°	3132.1	1304.1	871.9	850.7	821.9	879.3	910.2	914.5	920.9	942.2	945.4
57.5°	3205.6	1310.5	818.7	791.0	769.7	832.5	884.7	887.9	883.6	909.2	913.4
60°	3227.9	1307.3	779.3	725.0	712.2	782.5	847.5	853.8	852.8	890.0	897.5
62.5°	3134.2	1266.9	739.9	669.6	661.1	731.4	795.2	820.8	826.1	879.3	888.9
65°	2913.9	1183.9	687.8	611.1	611.1	677.1	745.2	780.4	795.2	866.6	877.2
67.5°	2623.2	1085.9	634.5	561.0	558.9	624.9	692.0	728.2	751.6	848.5	854.9
70°	2177.2	953.9	568.5	506.8	506.8	566.4	627.0	670.7	704.8	814.4	814.4
72.5°	1491.5	793.1	488.6	445.0	446.1	501.4	563.2	612.2	652.6	746.3	748.4
75°	943.3	619.6	401.3	379.0	383.2	435.5	499.3	550.4	631.3	737.8	741.0
77.5°	501.4	435.5	319.4	314.0	319.4	367.3	438.6	508.9	633.4	639.8	629.2
80°	324.7	308.7	252.3	241.7	243.8	295.9	390.7	483.3	508.9	515.3	491.8
82.5°	176.7	195.9	178.9	168.2	168.2	231.0	333.2	384.3	365.2	303.4	289.6
85°	75.6	91.6	92.6	80.9	77.7	142.6	223.5	209.7	194.9	186.3	184.2
87.5°	21.3	29.8	29.8	22.4	17.1	39.4	44.7	12.8	0.0	1.1	2.1
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)