

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: P454312

Luminaire Tested: **GALN-SA5B-830-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454312
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-SA5B-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22866 lumens
Efficiency: N/A
Efficacy: 112.1 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): 204
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



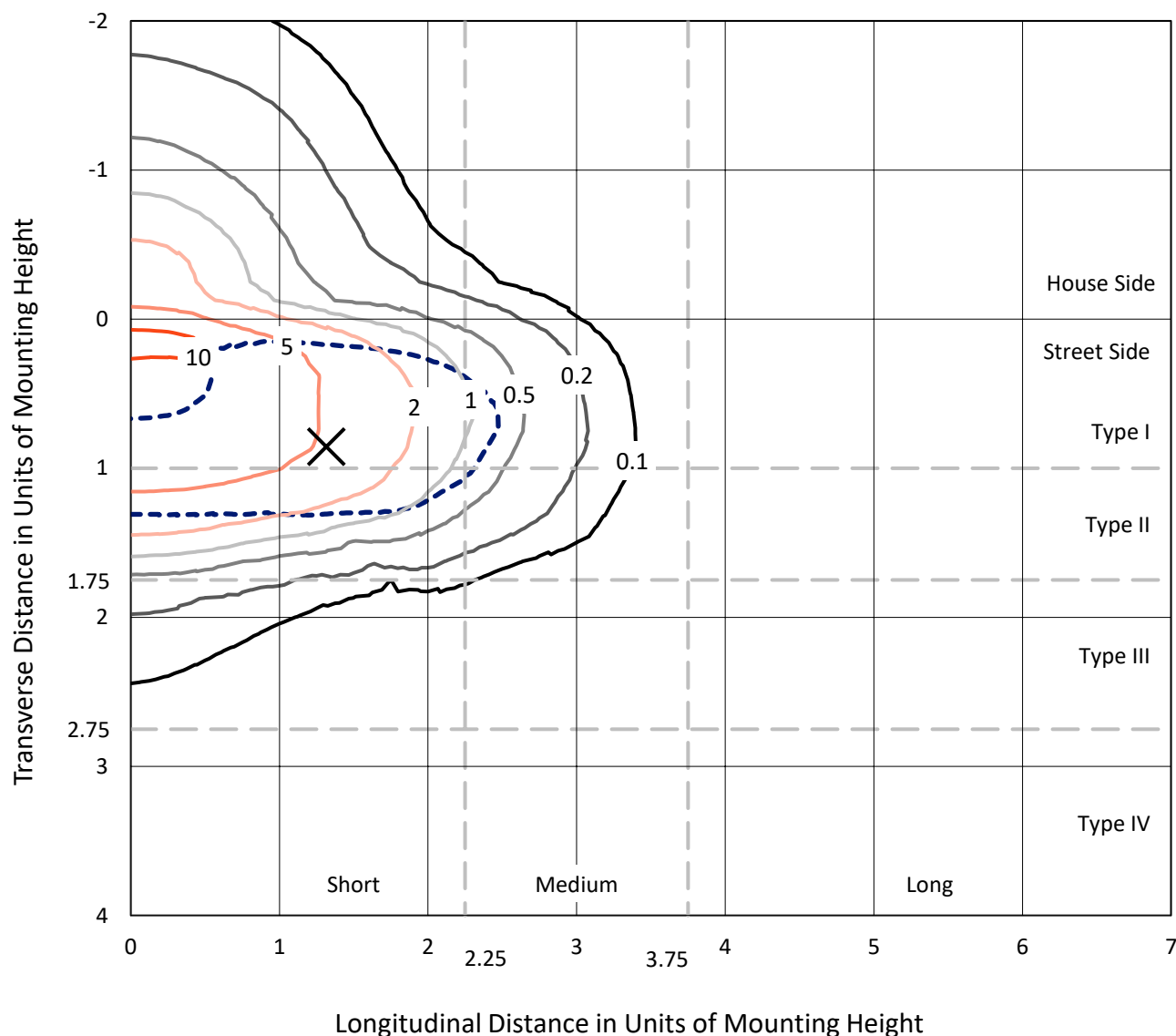
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

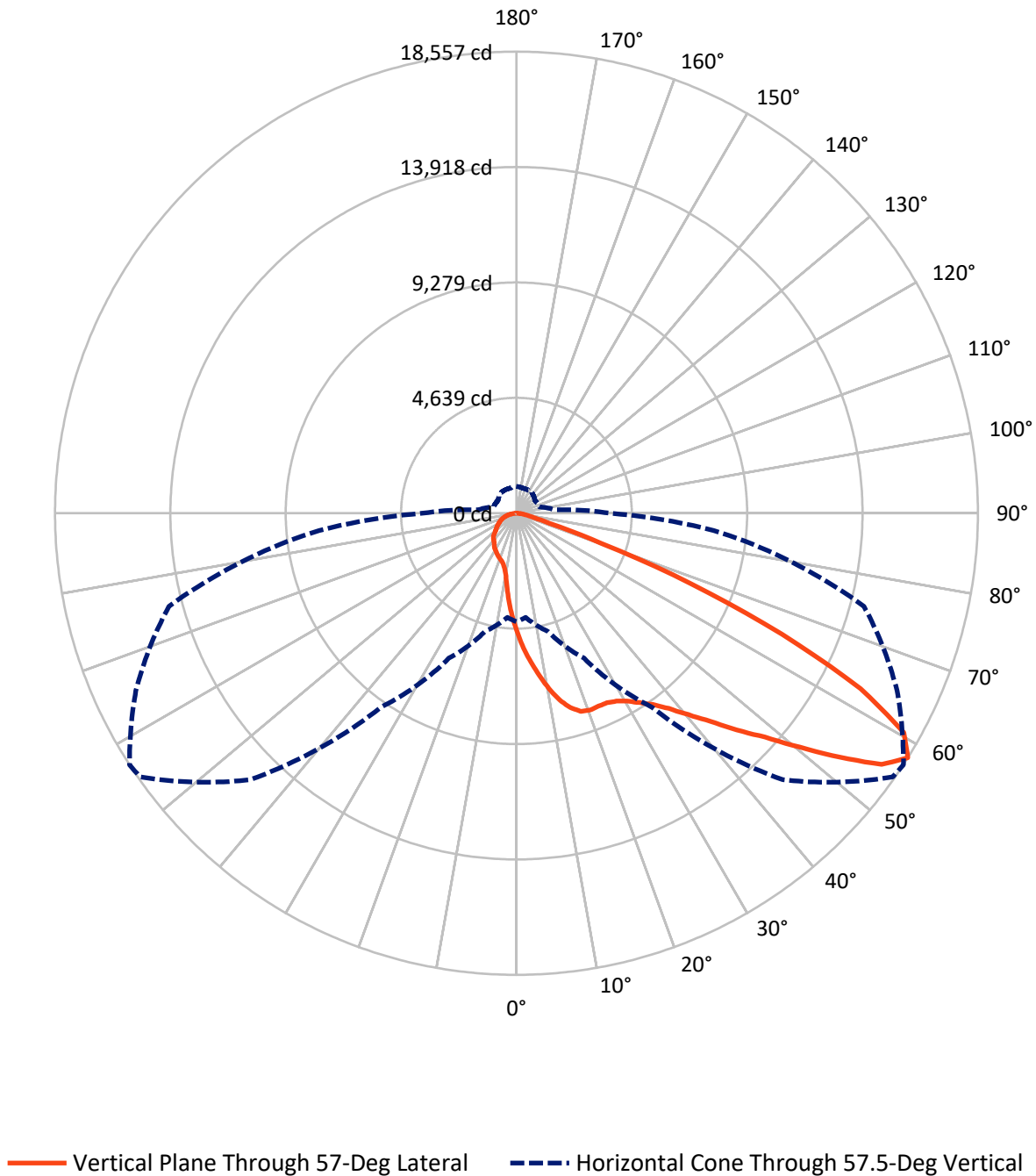


Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3477.3	0.0	3477.3
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	19388.7	0.0	19388.7
	% Fixture	84.8	0.0	84.8
Total	Lumens	22866.0	0.0	22866.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.7	2.0
10°-20°	1360.7	6.0
20°-30°	2259.4	9.9
30°-40°	3403.3	14.9
40°-50°	5109.7	22.3
50°-60°	5727.4	25.0
60°-70°	3351.9	14.7
70°-80°	991.5	4.3
80°-90°	200.4	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°	22866.0	100.0
0°-180°	22866.0	100.0

Coefficient of Utilization



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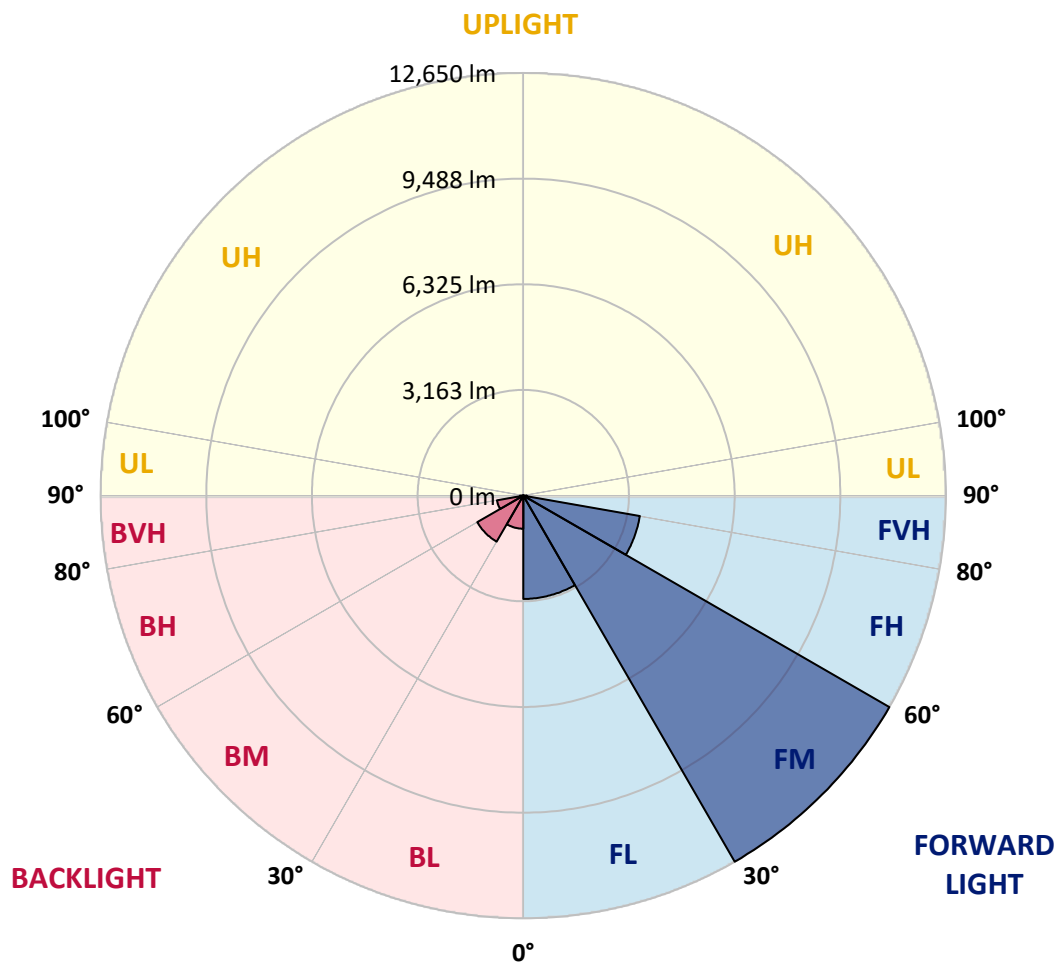
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3091.0	13.5			
FM	(30°-60°)	12650.5	55.3			
FH	(60°-80°)	3543.3	15.5			G2/5000
FVH	(80°-90°)	104.0	0.5			G2/225
BL	(0°-30°)	990.8	4.3	B2/1000		
BM	(30°-60°)	1590.0	7.0	B2/2500		
BH	(60°-80°)	800.1	3.5	B2/1000		G2/1000
BVH	(80°-90°)	96.4	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°	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9
2.5°	5969.2	5904.1	5852.8	5807.7	5748.9	5589.9	5431.0	5428.5	5302.0	5106.8	4906.5
5°	6941.7	6854.1	6865.4	6725.2	6585.0	6354.7	6018.0	6000.5	5731.4	5365.9	4994.1
7.5°	7575.1	7576.3	7541.3	7461.2	7309.7	7048.1	6666.4	6580.0	6205.7	5651.3	5094.3
10°	7542.5	7576.3	7635.1	7704.0	7750.3	7621.4	7273.4	7168.3	6681.4	5996.7	5205.7
12.5°	7109.4	7162.0	7245.9	7418.6	7697.7	7910.5	7791.6	7706.5	7232.1	6340.9	5328.3
15°	6839.1	6870.4	6916.7	7033.1	7333.5	7842.9	8150.8	8105.8	7751.6	6730.2	5466.0
17.5°	6756.5	6787.8	6802.8	6874.1	7088.2	7610.1	8292.3	8372.4	8212.2	7088.2	5604.9
20°	6839.1	6854.1	6854.1	6896.7	7064.4	7473.7	8286.0	8447.5	8590.2	7517.5	5735.1
22.5°	7055.6	7061.9	7053.1	7068.1	7193.3	7511.2	8227.2	8427.5	8895.6	7881.7	5836.5
25°	7407.3	7417.4	7359.8	7324.7	7416.1	7676.5	8259.7	8443.7	9134.6	8229.7	5904.1
27.5°	7806.6	7819.1	7749.0	7667.7	7710.2	7880.5	8387.4	8552.6	9313.6	8572.6	5946.7
30°	8296.0	8301.0	8183.4	8085.7	8058.2	8184.6	8605.2	8759.1	9536.4	8976.9	6010.5
32.5°	8796.7	8834.2	8682.8	8545.1	8498.8	8537.6	8926.9	9075.8	9801.8	9411.3	6113.1
35°	9477.6	9483.9	9302.4	9134.6	8981.9	9032.0	9338.7	9446.3	10168.5	9913.2	6258.3
37.5°	10327.5	10385.1	10134.7	9821.8	9634.1	9561.5	9836.8	9954.5	10682.9	10529.0	6477.4
40°	11271.2	11292.5	11078.5	10883.2	10540.3	10330.0	10520.2	10647.9	11317.5	11263.7	6731.4
42.5°	11864.5	11910.8	11927.1	11907.1	11649.2	11296.3	11368.9	11428.9	12068.5	11953.4	6991.8
45°	12064.8	12133.6	12366.4	12859.6	12887.1	12539.2	12370.2	12427.8	12887.1	12649.3	7240.9
47.5°	11733.1	11850.8	12280.1	13291.4	14048.7	14075.0	13565.5	13439.1	13633.1	13226.3	7421.1
50°	10875.7	10900.7	11557.9	13022.3	14593.1	15543.2	15016.2	14780.9	14341.6	13653.1	7545.0
52.5°	9548.9	9577.7	10128.5	11771.9	14257.7	16569.5	16713.5	16292.9	15061.3	13984.8	7626.4
55°	7088.2	7254.6	7860.4	9448.8	12668.1	16473.1	18062.8	17823.7	15931.2	14247.7	7754.1
57.5°	4358.3	4205.6	4924.0	6428.5	9527.7	15148.9	18479.6	18557.2	16888.7	14468.0	7968.1
60°	2005.2	2035.2	2331.8	3315.7	5807.7	11850.8	17405.6	17896.3	17418.2	14460.5	8021.9
62.5°	1381.8	1354.3	1279.2	1455.7	2648.5	7495.0	14702.0	15533.1	16356.7	14011.1	7807.9
65°	1235.4	1207.9	1062.7	1013.8	1216.6	3266.8	10688.0	11736.8	13772.1	12877.1	7274.7
67.5°	1154.0	1116.5	966.3	871.2	868.7	1300.5	6302.1	7565.1	10214.8	10887.0	6303.4
70°	1068.9	1038.9	889.9	784.8	739.7	817.3	2769.9	3626.1	6632.6	7845.4	4910.3
72.5°	983.8	948.8	814.8	702.2	643.4	612.1	1061.4	1380.6	3747.5	4703.8	3010.3
75°	859.9	842.4	728.5	635.8	572.0	494.4	673.4	768.5	1792.4	2160.4	1510.8
77.5°	752.2	733.5	647.1	555.7	509.4	401.8	478.1	521.9	756.0	876.2	682.2
80°	550.7	569.5	545.7	490.7	454.4	315.4	321.7	358.0	449.3	496.9	416.8
82.5°	349.2	384.3	420.6	378.0	344.2	249.1	222.8	236.6	306.7	325.4	185.2
85°	146.4	148.9	244.1	230.3	196.5	147.7	133.9	141.4	164.0	171.5	86.4
87.5°	56.3	55.1	86.4	80.1	61.3	42.6	42.6	47.6	65.1	60.1	27.5
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°	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9	4803.9
2.5°	4820.2	4731.3	4554.8	4335.8	4175.5	3995.3	3836.3	3722.4	3679.9	3659.9	3622.3
5°	4816.4	4641.2	4275.7	3892.7	3584.8	3269.3	3002.7	2830.0	2815.0	2699.8	2688.6
7.5°	4817.7	4549.8	3967.8	3404.5	2935.2	2612.2	2391.9	2334.4	2265.5	2248.0	2256.7
10°	4821.4	4433.4	3637.3	2921.4	2467.0	2255.5	2172.9	2150.4	2152.9	2160.4	2161.6
12.5°	4826.4	4320.7	3294.4	2554.6	2204.2	2116.6	2107.8	2127.8	2149.1	2165.4	2169.1
15°	4832.7	4191.8	2960.2	2259.3	2072.8	2065.2	2094.0	2127.8	2157.9	2181.6	2185.4
17.5°	4825.2	4041.6	2679.8	2077.8	2000.2	2036.5	2084.0	2126.6	2154.1	2176.6	2179.1
20°	4807.6	3873.9	2409.5	1950.1	1955.1	2013.9	2065.2	2105.3	2135.3	2146.6	2155.4
22.5°	4740.1	3673.6	2174.1	1851.2	1901.3	1982.6	2044.0	2067.7	2034.0	2010.2	2016.4
25°	4624.9	3413.3	1955.1	1771.1	1852.5	1938.8	2001.4	1943.8	1916.3	1906.3	1911.3
27.5°	4481.0	3127.9	1789.9	1687.2	1789.9	1890.0	1872.5	1862.5	1850.0	1833.7	1837.4
30°	4325.7	2848.8	1649.7	1622.2	1722.3	1779.9	1787.4	1803.6	1789.9	1764.8	1774.9
32.5°	4181.8	2585.9	1543.3	1567.1	1674.7	1666.0	1722.3	1741.1	1677.2	1593.4	1597.1
35°	4059.1	2341.9	1463.2	1513.3	1593.4	1597.1	1653.4	1588.4	1519.5	1479.5	1482.0
37.5°	3966.5	2151.6	1410.6	1466.9	1489.5	1537.0	1507.0	1473.2	1464.4	1436.9	1438.2
40°	3911.4	1985.1	1376.8	1430.7	1426.9	1459.4	1363.1	1396.9	1409.4	1400.6	1401.9
42.5°	3856.4	1867.5	1341.8	1380.6	1379.3	1315.5	1294.2	1323.0	1355.6	1359.3	1356.8
45°	3812.6	1776.1	1305.5	1304.2	1329.3	1229.1	1222.9	1240.4	1286.7	1309.2	1308.0
47.5°	3763.8	1699.8	1250.4	1215.4	1222.9	1175.3	1165.3	1172.8	1229.1	1265.4	1275.4
50°	3702.4	1623.4	1181.6	1134.0	1102.7	1125.2	1127.7	1129.0	1185.3	1226.6	1235.4
52.5°	3653.6	1565.8	1102.7	1067.7	1030.1	1080.2	1099.0	1101.5	1135.3	1169.1	1175.3
55°	3682.4	1533.3	1025.1	1000.1	966.3	1033.9	1070.2	1075.2	1082.7	1107.7	1111.5
57.5°	3768.8	1540.8	962.5	930.0	905.0	978.8	1040.1	1043.9	1038.9	1068.9	1073.9
60°	3795.0	1537.0	916.2	852.4	837.4	920.0	996.3	1003.8	1002.6	1046.4	1055.2
62.5°	3684.9	1489.5	869.9	787.3	777.3	859.9	935.0	965.0	971.3	1033.9	1045.1
65°	3425.8	1391.8	808.6	718.5	718.5	796.1	876.2	917.5	935.0	1018.9	1031.4
67.5°	3084.1	1276.7	746.0	659.6	657.1	734.7	813.6	856.1	883.7	997.6	1005.1
70°	2559.7	1121.5	668.4	595.8	595.8	665.9	737.2	788.5	828.6	957.5	957.5
72.5°	1753.6	932.5	574.5	523.2	524.4	589.5	662.1	719.7	767.3	877.4	879.9
75°	1109.0	728.5	471.9	445.6	450.6	511.9	587.0	647.1	742.2	867.4	871.2
77.5°	589.5	511.9	375.5	369.2	375.5	431.8	515.7	598.3	744.7	752.2	739.7
80°	381.8	363.0	296.6	284.1	286.6	348.0	459.4	568.3	598.3	605.8	578.3
82.5°	207.8	230.3	210.3	197.8	197.8	271.6	391.8	451.9	429.3	356.7	340.5
85°	88.9	107.6	108.9	95.1	91.4	167.7	262.8	246.6	229.1	219.0	216.5
87.5°	25.0	35.0	35.0	26.3	20.0	46.3	52.6	15.0	0.0	1.3	2.5
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)