

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: P459088

Luminaire Tested: **GALN-SA5D-735-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-735-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36931 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

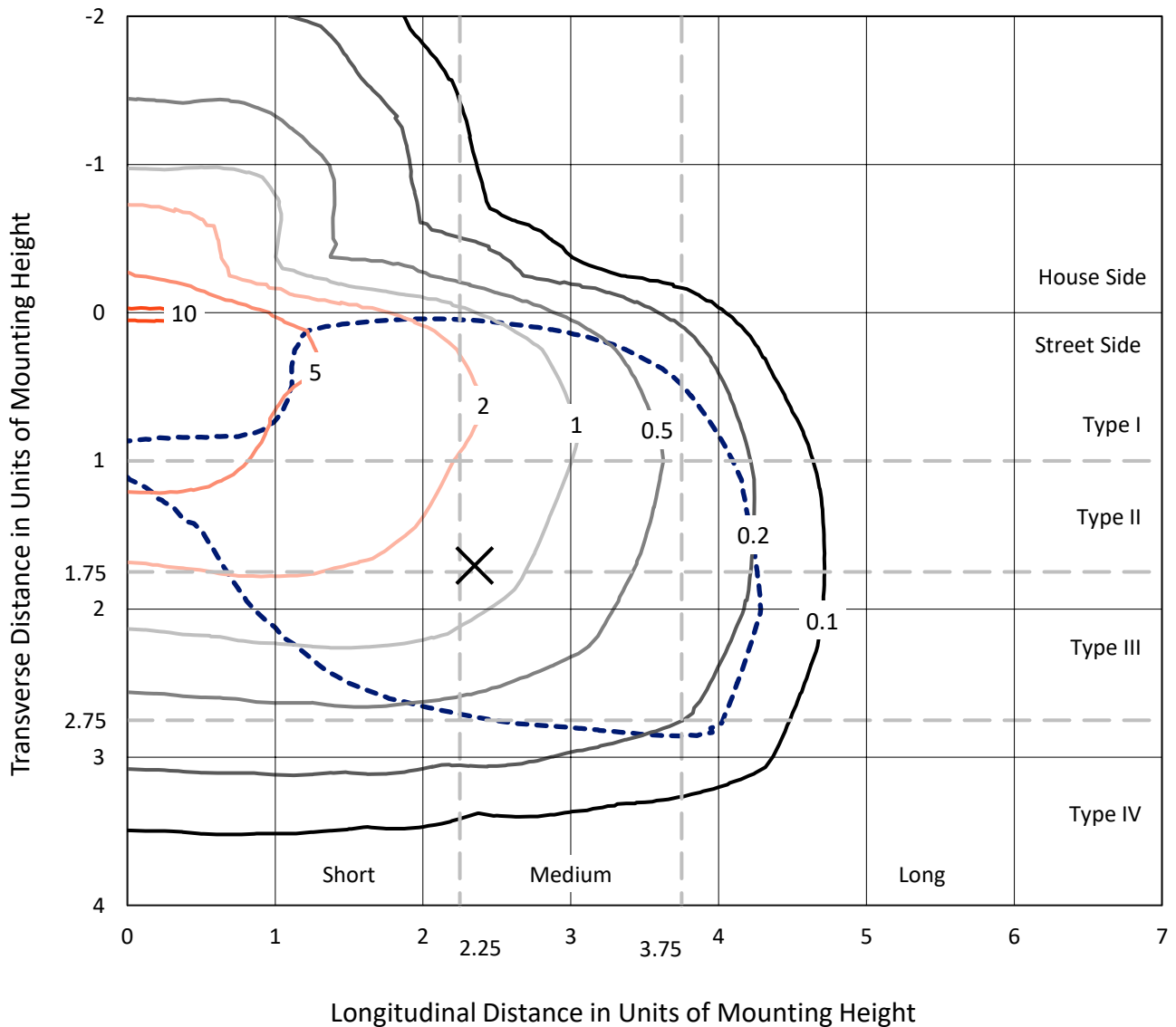
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

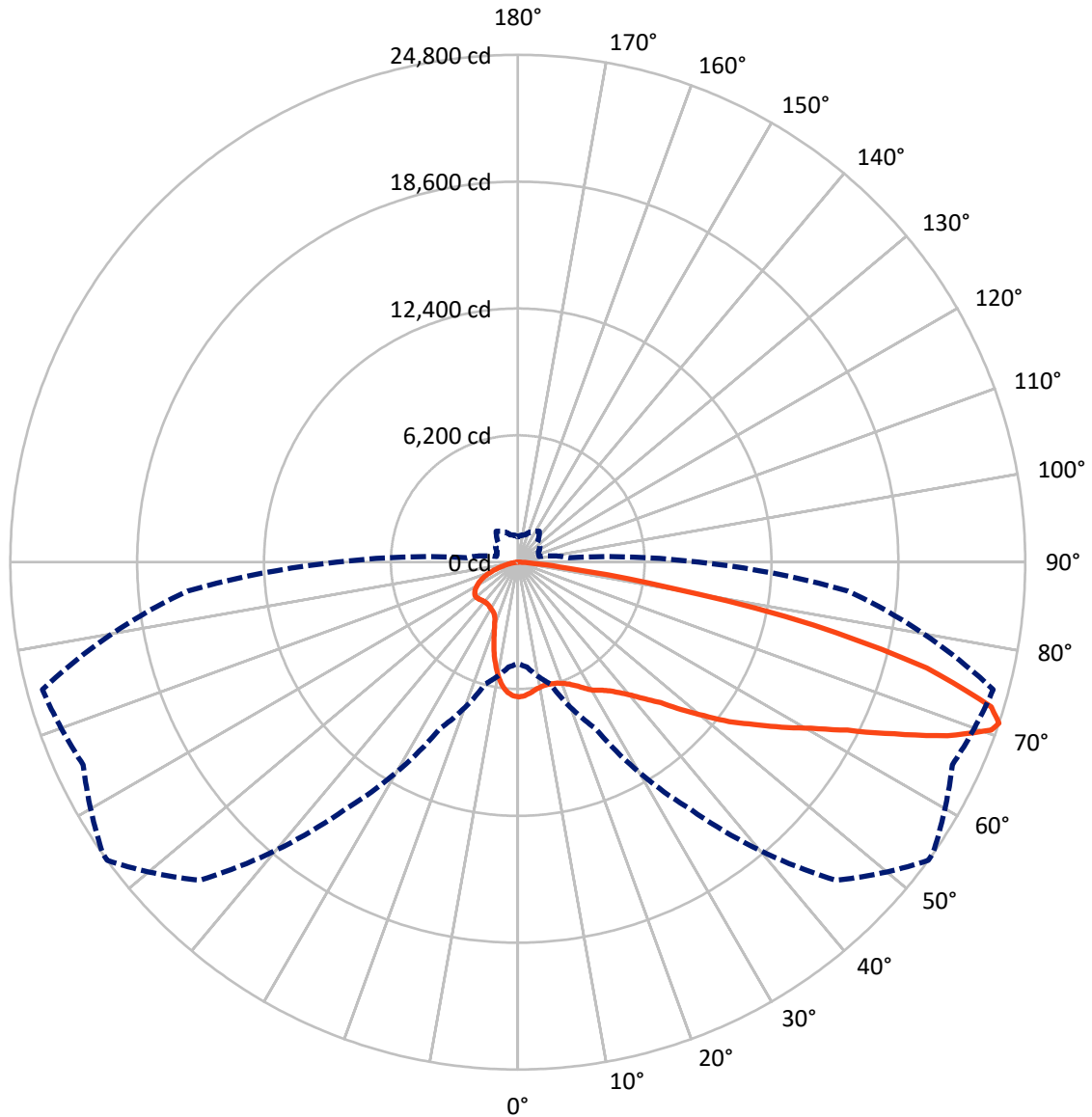
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6667.7	0.0	6667.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	30263.3	0.0	30263.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	36931.0	0.0	36931.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	587.2	1.6
10°-20°	1550.5	4.2
20°-30°	2581.6	7.0
30°-40°	3817.3	10.3
40°-50°	5376.8	14.6
50°-60°	7199.8	19.5
60°-70°	9074.8	24.6
70°-80°	6198.0	16.8
80°-90°	545.1	1.5
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°	36931.0	100.0
0°-180°	36931.0	100.0

Coefficient of Utilization



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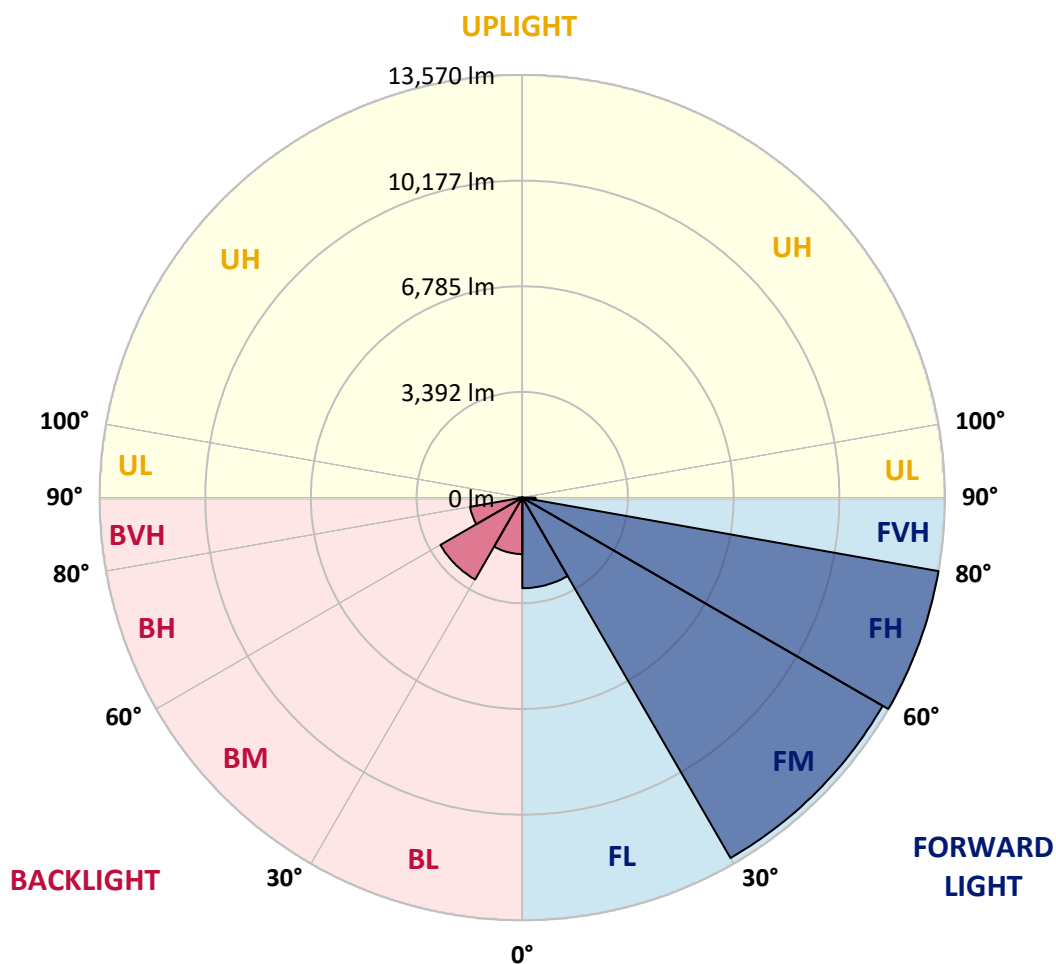
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2907.1	7.9			
FM	(30°-60°)	13360.3	36.2			
FH	(60°-80°)	13569.9	36.7			G5
FVH	(80°-90°)	426.1	1.2			G3/500
BL	(0°-30°)	1812.1	4.9	B3/2500		
BM	(30°-60°)	3033.6	8.2	B3/5000		
BH	(60°-80°)	1702.9	4.6	B3/2500		G3/2500
BVH	(80°-90°)	119.0	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0
2.5°	6365.6	6395.5	6403.5	6423.5	6465.4	6499.3	6533.2	6529.2	6577.1	6597.0	6615.0
5°	6082.3	6090.3	6120.2	6160.1	6234.0	6327.7	6419.5	6421.5	6539.2	6632.9	6678.8
7.5°	5874.9	5900.8	5920.8	5962.6	6040.4	6142.2	6287.8	6299.8	6509.2	6694.8	6792.5
10°	5739.2	5769.1	5791.1	5843.0	5920.8	6034.5	6192.1	6214.0	6487.3	6792.5	6964.1
12.5°	5615.5	5645.5	5665.4	5733.2	5835.0	5974.6	6152.2	6178.1	6495.3	6906.2	7151.6
15°	5691.3	5715.3	5707.3	5727.3	5795.1	5954.7	6168.1	6194.1	6525.2	7015.9	7337.1
17.5°	6028.5	6048.4	5982.6	5906.8	5874.9	5992.6	6218.0	6245.9	6585.0	7129.6	7526.6
20°	6525.2	6579.1	6435.4	6265.9	6112.3	6128.2	6321.7	6351.6	6668.8	7243.4	7720.1
22.5°	7171.5	7211.4	7035.9	6756.6	6473.3	6327.7	6477.3	6495.3	6794.5	7391.0	7931.6
25°	7931.6	7955.5	7712.1	7353.1	6944.1	6668.8	6690.8	6722.7	7002.0	7558.5	8119.1
27.5°	8669.7	8745.5	8464.2	8025.3	7486.7	7027.9	6984.0	7004.0	7227.4	7652.3	8248.8
30°	9545.4	9539.4	9242.2	8733.5	8043.3	7418.9	7261.3	7257.3	7349.1	7698.2	8342.5
32.5°	10243.6	10325.4	10034.2	9479.6	8679.7	7823.9	7452.8	7444.8	7442.8	7778.0	8482.2
35°	11037.6	11049.6	10782.2	10223.7	9367.9	8332.5	7720.1	7680.2	7634.3	7949.5	8671.7
37.5°	11747.8	11803.6	11558.2	10931.9	10044.1	8861.2	8087.2	8061.2	7921.6	8246.8	8974.9
40°	12302.3	12344.2	12196.6	11600.1	10710.4	9431.7	8554.0	8506.1	8336.5	8733.5	9379.9
42.5°	12483.9	12569.6	12627.5	12334.2	11476.5	10108.0	9128.5	9068.7	8939.0	9471.6	9846.7
45°	12497.8	12633.5	12938.7	12952.7	12246.5	10917.9	9798.8	9756.9	9746.9	10417.2	10503.0
47.5°	12392.1	12529.7	13042.4	13319.7	12932.7	11735.8	10766.3	10700.5	10706.4	11586.2	11239.1
50°	12136.8	12300.3	12922.7	13555.1	13469.3	12585.6	11787.7	11765.7	11889.4	12920.7	12003.1
52.5°	11656.0	11853.5	12799.1	13702.7	13868.3	13317.7	12948.7	12886.8	13200.0	14369.0	12838.9
55°	10325.4	10622.7	12346.2	13784.5	14247.3	14017.9	13994.0	14105.7	14520.6	15948.9	13758.6
57.5°	9631.2	9854.6	11362.7	13798.5	14726.1	14831.8	15214.8	15242.8	15968.9	17626.6	14797.9
60°	9252.2	9449.7	10824.1	13706.7	15394.4	15839.2	16463.6	16563.4	17383.2	19443.9	15875.1
62.5°	8921.0	9090.6	10501.0	13389.5	16148.4	17333.4	18081.5	18129.3	18989.1	21450.8	16938.4
65°	8141.0	8334.5	9850.6	13072.3	16798.8	19200.6	20227.9	20172.1	20698.7	23182.3	17604.7
67.5°	7089.7	7335.1	8635.8	11977.2	17119.9	21241.3	22645.7	22575.9	22386.4	24317.4	17796.2
70°	5747.2	5878.9	7081.8	10084.0	15837.2	22312.6	24554.8	24481.0	23431.7	24467.0	16890.5
71°	4945.3	5150.7	6166.1	8956.9	14770.0	21985.4	24800.2	24780.2	23433.7	24054.1	16208.3
72.5°	3860.1	3985.7	4883.4	6940.1	12553.7	20126.2	24193.7	24269.5	22925.0	22907.0	14801.9
75°	2441.7	2497.6	3064.1	4085.5	6888.3	14253.3	20652.8	20858.3	20355.6	18749.7	11007.7
77.5°	1418.3	1490.2	1835.3	2407.8	2976.3	7736.1	14778.0	15001.4	14143.6	10323.4	4506.4
80°	825.9	905.7	1208.9	1398.4	1366.5	2870.6	7524.6	7905.6	6124.2	2607.3	1264.7
82.5°	458.8	512.7	849.8	851.8	728.1	937.6	2367.9	2477.6	1747.5	1051.3	516.7
85°	333.1	377.0	548.6	496.7	349.1	403.0	823.9	863.8	706.2	442.9	167.6
87.5°	117.7	167.6	301.2	239.4	95.8	83.8	237.4	193.5	179.5	123.7	37.9
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°	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0	6589.0
2.5°	6624.9	6628.9	6609.0	6573.1	6537.2	6491.3	6439.4	6399.5	6381.6	6379.6	6377.6
5°	6696.8	6706.7	6630.9	6519.2	6395.5	6243.9	6114.3	5966.6	5928.7	5868.9	5886.8
7.5°	6812.5	6806.5	6656.9	6419.5	6130.2	5809.0	5537.7	5380.1	5216.6	5170.7	5172.7
10°	6978.0	6940.1	6656.9	6216.0	5733.2	5256.5	4877.4	4638.1	4508.4	4400.7	4360.8
12.5°	7153.6	7057.8	6593.0	5930.7	5222.6	4638.1	4231.1	3907.9	3824.2	3736.4	3738.4
15°	7321.2	7161.6	6467.4	5529.8	4672.0	3977.8	3582.8	3389.3	3363.3	3373.3	3371.3
17.5°	7472.8	7235.4	6275.8	5082.9	4029.6	3411.2	3201.8	3215.7	3285.5	3335.4	3341.4
20°	7626.4	7279.3	5990.6	4484.5	3423.2	3068.1	3076.1	3185.8	3291.5	3359.4	3369.3
22.5°	7772.0	7299.2	5655.4	3905.9	2984.3	2922.5	3040.2	3157.9	3261.6	3327.4	3337.4
25°	7867.7	7253.3	5180.7	3301.5	2768.9	2870.6	2994.3	3094.0	3181.8	3249.6	3265.6
27.5°	7893.7	7105.7	4592.2	2812.8	2669.1	2820.7	2934.4	3008.3	3076.1	3139.9	3151.9
30°	7879.7	6888.3	3945.8	2525.5	2611.3	2762.9	2850.7	2904.5	2986.3	3036.2	3046.2
32.5°	7857.8	6634.9	3271.6	2371.9	2563.4	2709.0	2760.9	2808.8	2806.8	2786.8	2800.8
35°	7865.8	6331.7	2725.0	2280.1	2521.5	2669.1	2713.0	2653.2	2481.6	2473.6	2465.7
37.5°	7907.6	6032.5	2328.0	2216.3	2499.6	2663.1	2687.1	2411.8	2260.2	2190.4	2172.4
40°	8015.4	5683.4	2066.7	2168.4	2497.6	2709.0	2569.4	2290.1	1998.9	1863.2	1853.2
42.5°	8159.0	5340.3	1907.1	2138.5	2521.5	2778.8	2521.5	2118.5	1801.4	1721.6	1709.6
45°	8372.4	4947.3	1819.3	2124.5	2557.4	2804.8	2505.5	1992.9	1721.6	1657.7	1657.7
47.5°	8613.8	4572.2	1771.4	2114.6	2603.3	2786.8	2363.9	1953.0	1683.7	1691.6	1729.5
50°	8853.2	4247.1	1735.5	2092.6	2643.2	2776.9	2306.1	1951.0	1693.6	1795.4	1863.2
52.5°	9130.5	4017.7	1691.6	2056.7	2643.2	2713.0	2288.1	1990.9	1721.6	1751.5	1781.4
55°	9465.6	3945.8	1635.8	1978.9	2595.3	2553.4	2278.1	2048.7	1741.5	1671.7	1683.7
57.5°	9908.5	4061.5	1581.9	1881.2	2485.6	2387.9	2274.1	2064.7	1695.6	1637.8	1625.8
60°	10423.2	4291.0	1566.0	1781.4	2336.0	2246.2	2250.2	2018.8	1631.8	1572.0	1581.9
62.5°	10784.2	4428.6	1556.0	1705.6	2172.4	2090.6	2192.4	1962.9	1603.9	1552.0	1562.0
65°	10784.2	4261.0	1464.2	1589.9	1961.0	1903.1	2122.5	1893.1	1568.0	1508.1	1498.1
67.5°	10375.3	3772.3	1324.6	1416.4	1727.6	1689.7	2024.8	1809.3	1514.1	1468.2	1444.3
70°	9310.0	2860.6	1149.0	1212.9	1432.3	1466.2	1899.1	1695.6	1424.3	1368.5	1332.6
71°	8841.2	2491.6	1075.2	1109.1	1318.6	1368.5	1839.3	1647.8	1384.4	1304.6	1240.8
72.5°	7937.6	2098.6	963.5	977.5	1127.1	1216.9	1713.6	1556.0	1308.6	1194.9	1123.1
75°	6030.5	1532.1	776.0	768.0	833.9	965.5	1450.3	1386.4	1147.0	993.4	951.6
77.5°	2605.3	833.9	580.5	586.5	566.5	732.1	1141.1	1190.9	983.5	807.9	770.0
80°	790.0	480.8	397.0	405.0	379.0	490.7	803.9	933.6	790.0	628.4	576.5
82.5°	405.0	287.3	271.3	267.3	241.4	277.3	486.7	638.4	564.5	393.0	347.1
85°	175.5	153.6	133.7	129.7	113.7	99.7	173.6	319.2	299.2	219.4	209.5
87.5°	43.9	39.9	25.9	23.9	14.0	2.0	0.0	0.0	0.0	0.0	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)