

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: P191157

Luminaire Tested: **GLEON-AF-09-LED-E1-SL3-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-SL3-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35868.7 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 290
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: 25 FT

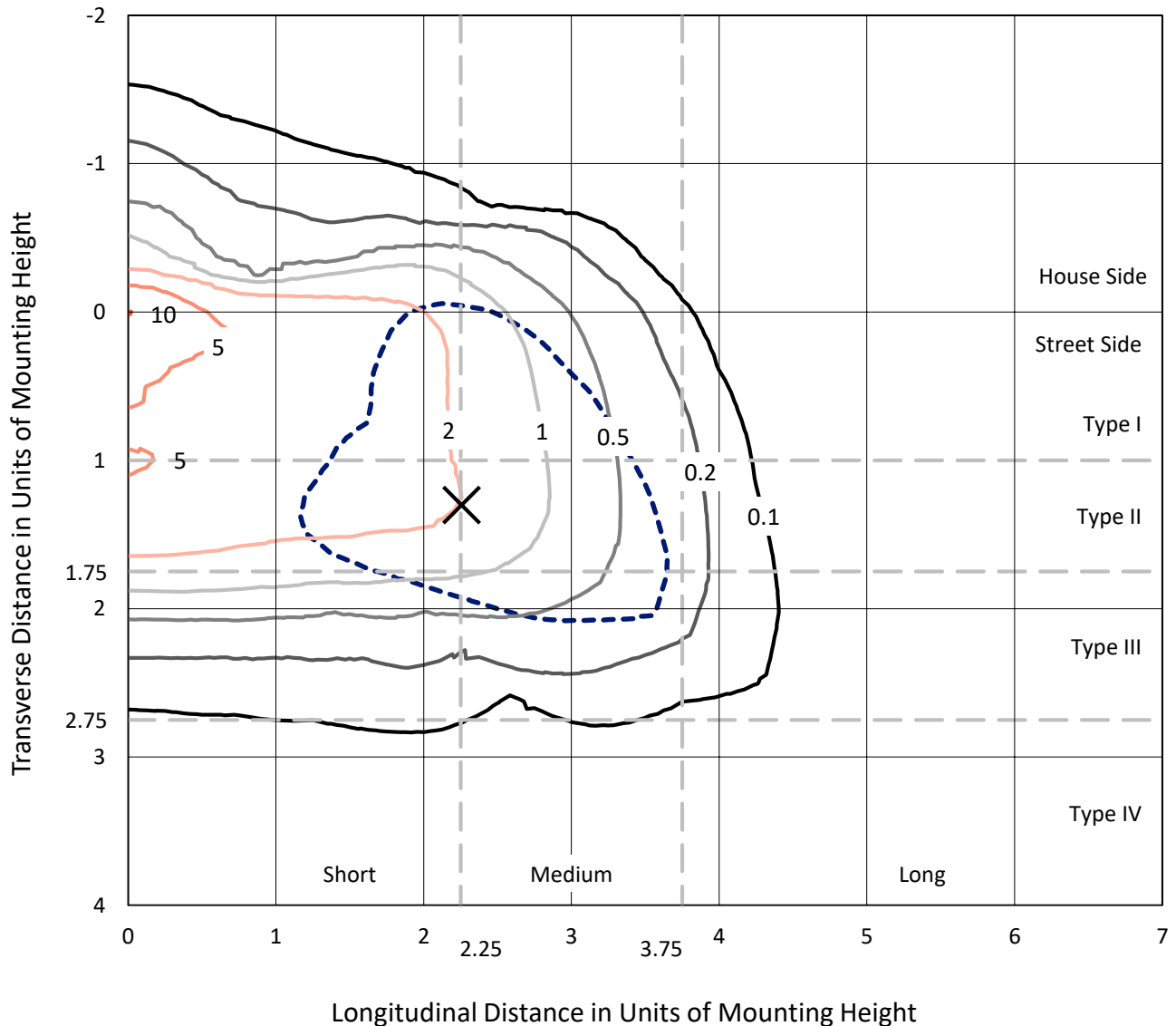


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Iso-Footcandle Lines of Horizontal Illumination

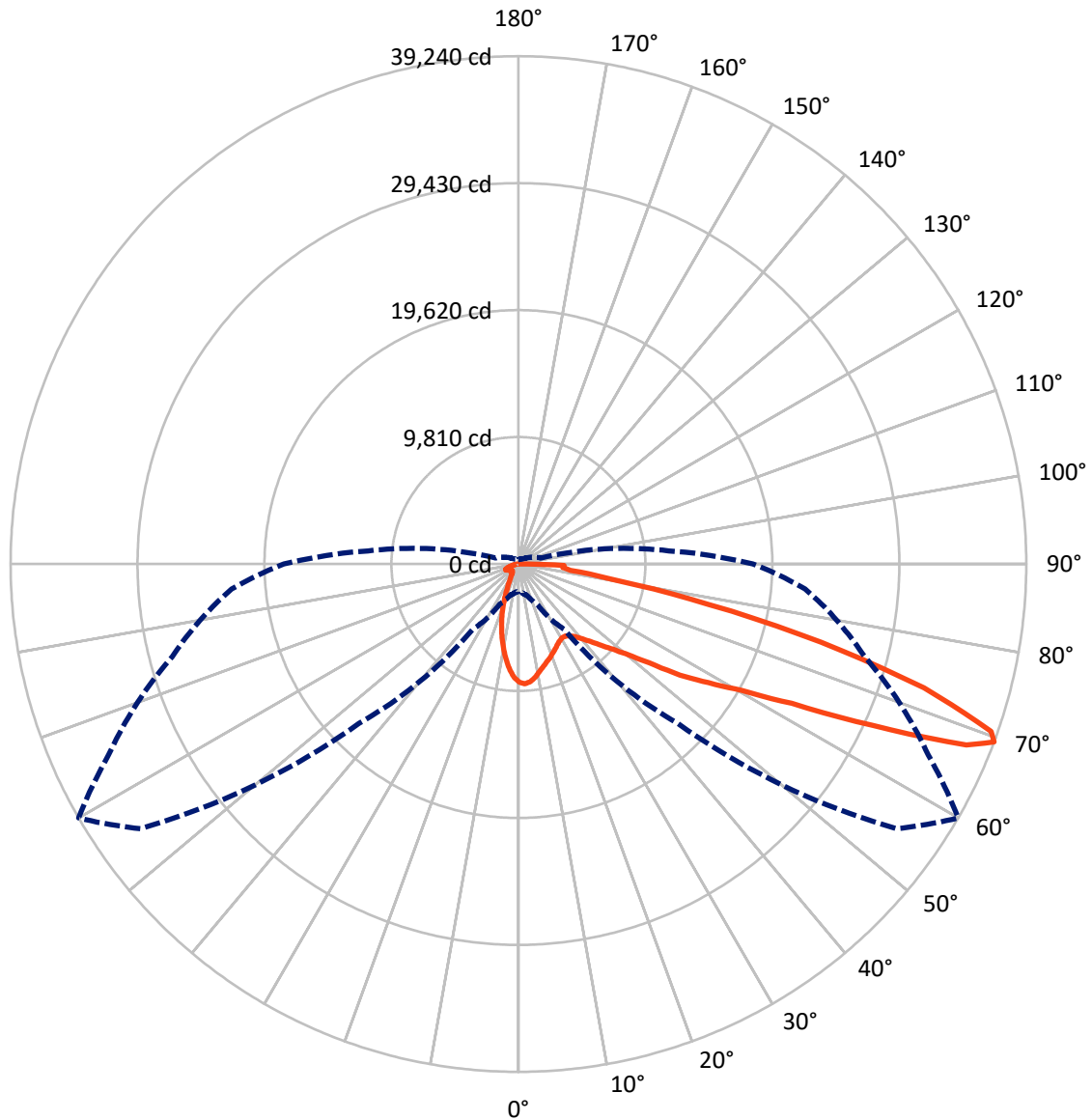
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.2 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5103.0	0.0	5103.0
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	30765.8	0.0	30765.8
	% Fixture	85.8	0.0	85.8
Total	Lumens	35868.7	0.0	35868.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	772.8	2.2
10°-20°	1646.5	4.6
20°-30°	2098.0	5.8
30°-40°	2884.2	8.0
40°-50°	4679.9	13.0
50°-60°	7505.3	20.9
60°-70°	9989.0	27.8
70°-80°	5393.3	15.0
80°-90°	899.9	2.5
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°	35868.7	100.0
0°-180°	35868.7	100.0

Coefficient of Utilization



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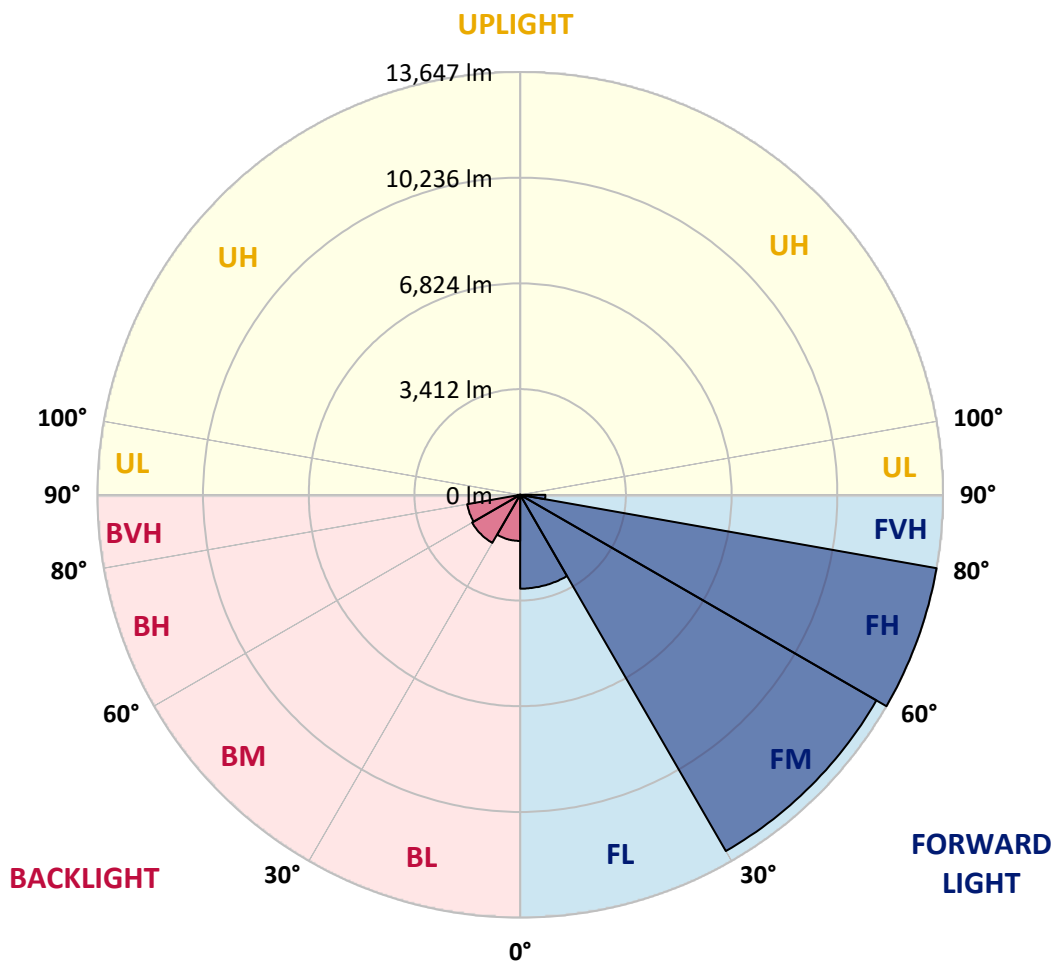
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3028.6	8.4			
FM	(30°-60°)	13276.5	37.0			
FH	(60°-80°)	13647.4	38.0			G5
FVH	(80°-90°)	813.2	2.3			G5
BL	(0°-30°)	1488.7	4.2	B3/2500		
BM	(30°-60°)	1792.8	5.0	B2/2500		
BH	(60°-80°)	1734.9	4.8	B3/2500		G3/2500
BVH	(80°-90°)	86.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9
2.5°	9327.1	9347.8	9339.1	9333.9	9349.6	9325.3	9275.1	9259.4	9235.2	9178.0	9081.0
5°	8977.0	9039.4	9035.9	9082.7	9160.7	9181.5	9159.0	9162.5	9117.4	9046.4	8885.1
7.5°	8372.3	8398.3	8412.1	8514.4	8656.5	8770.9	8867.9	8899.1	8878.3	8817.6	8609.7
10°	7748.5	7769.3	7802.3	7921.8	8102.0	8259.7	8443.3	8549.1	8594.1	8583.7	8351.6
12.5°	7213.1	7234.0	7277.3	7412.4	7627.2	7821.4	8088.2	8219.8	8327.2	8391.4	8141.9
15°	6733.2	6778.3	6819.8	6975.8	7216.6	7471.3	7772.8	7939.1	8105.5	8249.3	7956.5
17.5°	6359.0	6404.0	6428.2	6570.3	6826.8	7138.7	7492.1	7687.9	7895.9	8131.4	7772.8
20°	6142.4	6163.2	6152.7	6232.4	6462.9	6793.8	7213.1	7440.1	7691.4	8020.5	7589.2
22.5°	6081.7	6083.5	6045.3	6036.6	6185.7	6464.6	6915.1	7190.6	7499.0	7947.8	7431.4
25°	6229.0	6223.8	6119.8	6034.9	6050.5	6213.4	6627.5	6948.1	7337.9	7932.3	7310.2
27.5°	6556.5	6572.0	6417.9	6258.4	6100.8	6095.6	6409.2	6747.1	7206.2	8003.3	7258.2
30°	7015.6	7041.6	6877.0	6674.3	6378.0	6133.7	6324.3	6627.5	7124.8	8150.6	7249.6
32.5°	7518.1	7545.8	7421.1	7207.9	6819.8	6369.3	6383.2	6637.9	7121.4	8356.7	7308.5
35°	8053.5	8084.7	8020.5	7840.4	7408.9	6804.3	6608.5	6806.0	7234.0	8672.1	7466.1
37.5°	8651.3	8699.8	8717.2	8545.6	8084.7	7377.7	6977.5	7124.8	7488.6	9110.4	7755.5
40°	9512.4	9580.0	9574.8	9328.8	8859.2	8152.3	7547.5	7585.7	7885.4	9696.1	8218.1
42.5°	11161.9	11175.8	10744.4	10208.9	9711.7	8966.7	8219.8	8188.6	8433.0	10437.7	8899.1
45°	13260.2	13203.0	12243.2	11208.7	10602.3	9902.3	9094.9	8942.3	9127.8	11342.2	9751.6
47.5°	15001.6	14869.9	13657.0	12229.3	11544.8	10919.4	10122.3	9855.5	9957.7	12367.9	10853.5
50°	15606.2	15507.5	14502.6	13078.3	12437.2	12159.9	11387.2	11009.5	11037.2	13591.1	12144.4
52.5°	15476.3	15462.4	14791.9	13638.0	13272.4	13463.0	13178.8	12667.6	12397.3	14949.6	13537.4
55°	15169.6	15199.1	14956.6	14289.4	14227.1	14720.9	15519.6	15141.9	14301.6	16320.2	14977.3
57.5°	14104.0	14180.2	14713.9	15109.0	15764.0	16498.6	17404.8	17297.4	16351.4	17801.6	16689.2
60°	11362.9	11539.7	12970.9	14949.6	17345.9	19643.4	20048.9	19799.3	18465.2	19639.9	18950.4
62.5°	7961.6	8145.3	9846.8	12943.1	17085.9	23195.4	24775.7	23699.6	21500.9	22348.1	21876.8
65°	4262.4	4350.8	5650.3	8980.5	14424.6	23928.4	31683.9	30046.4	26307.3	25687.0	24380.6
67.5°	2351.3	2399.7	2897.0	4534.4	9238.7	21071.2	36084.9	37322.0	32314.5	27910.1	23924.9
69°	2126.0	2171.0	2496.8	3434.1	6182.2	17422.1	35655.2	39240.1	34948.2	27690.1	22240.7
70°	2079.2	2120.8	2413.7	3165.6	5004.0	14360.5	34215.2	38749.7	35575.5	26901.7	20771.4
72.5°	1871.3	1916.4	2200.5	2843.3	4276.2	7159.4	27102.7	32763.3	32299.0	23325.3	15755.3
75°	1744.8	1786.4	2268.1	2784.5	4094.4	4531.0	17867.5	24146.7	23743.0	16316.7	8495.3
77.5°	746.8	743.3	1051.7	2356.5	4155.0	4387.1	9600.8	15084.7	13762.7	6974.1	2439.6
80°	499.0	490.3	499.0	693.0	3810.2	4411.4	5030.0	7656.7	5783.7	1777.7	1202.5
82.5°	429.7	422.8	438.3	422.8	1339.3	5035.2	4276.2	4071.8	2749.8	1010.2	596.1
85°	289.4	277.2	377.8	379.4	632.4	4473.8	4816.9	3439.4	2224.8	599.6	294.5
87.5°	138.6	135.1	220.0	268.5	370.8	1817.6	5404.2	3524.3	2243.8	306.7	140.3
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°	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9	9139.9
2.5°	9051.6	8980.5	8911.2	8828.1	8741.4	8644.3	8595.9	8547.4	8535.2	8521.4	8472.8
5°	8802.0	8701.5	8528.2	8337.7	8136.7	7940.9	7791.9	7698.3	7627.2	7590.9	7526.8
7.5°	8479.8	8332.4	8029.2	7700.1	7362.2	7053.8	6786.9	6618.8	6459.4	6385.0	6300.0
10°	8173.1	7953.0	7481.8	6996.6	6511.4	6045.3	5607.0	5296.8	5021.4	4867.1	4757.9
12.5°	7909.7	7608.2	6954.9	6298.3	5633.0	4969.3	4312.7	3796.3	3364.9	3137.9	3021.8
15°	7653.3	7289.4	6454.2	5620.8	4766.6	3863.9	3001.0	2415.4	2058.4	1916.4	1867.8
17.5°	7421.1	6954.9	5951.7	4938.2	3872.6	2781.0	2016.8	1694.5	1557.6	1510.9	1495.3
20°	7169.9	6617.2	5430.2	4224.3	2940.4	1944.1	1575.0	1432.9	1377.5	1363.6	1356.7
22.5°	6927.2	6284.4	4931.2	3460.1	2112.2	1500.5	1353.3	1294.3	1285.6	1297.8	1297.8
25°	6721.1	5986.4	4392.3	2661.4	1550.8	1263.1	1211.2	1197.3	1230.2	1275.2	1283.9
27.5°	6566.8	5742.1	3818.9	1964.9	1235.4	1098.5	1096.8	1119.3	1200.7	1287.4	1304.7
30°	6461.2	5509.9	3205.4	1417.3	1036.1	966.8	994.5	1043.1	1162.6	1285.6	1318.6
32.5°	6407.5	5338.4	2566.1	1096.8	887.1	849.0	895.8	954.7	1072.6	1186.9	1230.2
35°	6449.1	5211.9	1963.1	914.8	783.2	753.7	802.2	859.4	928.7	977.2	1010.2
37.5°	6605.0	5161.7	1481.4	819.6	712.2	684.5	722.5	755.4	783.2	797.1	812.6
40°	6941.1	5215.4	1186.9	771.0	672.3	637.6	653.3	665.3	682.7	696.5	703.5
42.5°	7436.6	5376.5	1063.9	752.0	651.5	601.3	597.8	602.9	625.5	651.5	656.7
45°	8129.7	5660.7	1055.2	764.1	641.1	571.8	556.2	563.1	597.8	637.6	644.6
47.5°	9015.2	6093.8	1124.5	800.5	649.8	556.2	530.2	538.9	582.2	635.9	644.6
50°	10087.7	6698.6	1240.6	854.2	687.8	559.7	521.5	526.7	571.8	630.6	639.3
52.5°	11354.2	7556.2	1367.1	906.2	727.7	582.2	528.5	516.4	557.9	609.9	620.3
55°	12762.9	8656.5	1497.1	953.0	748.5	609.9	542.4	502.5	531.9	575.2	583.9
57.5°	14492.1	10195.1	1722.2	998.0	762.4	629.0	556.2	488.7	499.0	530.2	537.2
60°	16833.0	12371.4	2119.0	1072.6	793.6	635.9	554.4	476.5	466.1	483.4	486.9
62.5°	19638.2	14734.7	2450.0	1166.1	845.6	641.1	544.1	467.8	438.3	438.3	441.8
65°	21303.4	15367.2	2266.3	1244.1	888.8	635.9	531.9	459.2	417.6	398.5	400.3
67.5°	19891.2	13514.9	1942.4	1259.7	887.1	611.6	512.9	443.6	396.8	367.3	365.6
69°	18122.1	11660.9	1796.8	1218.0	845.6	580.4	488.7	426.3	381.2	350.0	348.3
70°	16696.1	10529.5	1701.5	1173.0	800.5	557.9	469.5	410.6	369.1	339.6	336.1
72.5°	12139.2	6899.5	1453.7	1008.4	660.1	467.8	405.5	360.4	329.2	311.9	308.4
75°	6066.1	3290.3	1180.0	817.8	506.0	374.3	332.7	301.5	285.9	282.4	280.7
77.5°	1992.6	1507.4	843.8	609.9	376.0	292.9	268.5	246.0	242.5	253.0	249.5
80°	1095.1	876.8	535.4	403.8	256.5	214.8	211.3	199.3	204.5	221.8	218.3
82.5°	557.9	455.7	330.9	242.5	173.3	154.2	168.1	161.1	168.1	183.6	181.9
85°	275.5	249.5	209.7	147.3	114.4	98.7	119.6	124.8	128.2	140.3	140.3
87.5°	159.4	147.3	110.9	69.4	57.2	52.0	69.4	67.6	79.7	86.6	84.9
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)