

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: P299978

Luminaire Tested: **GLNA-AF-08-LED-E1-SL3-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299978
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: GLNA-AF-08-LED-E1-SL3-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30295.2 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

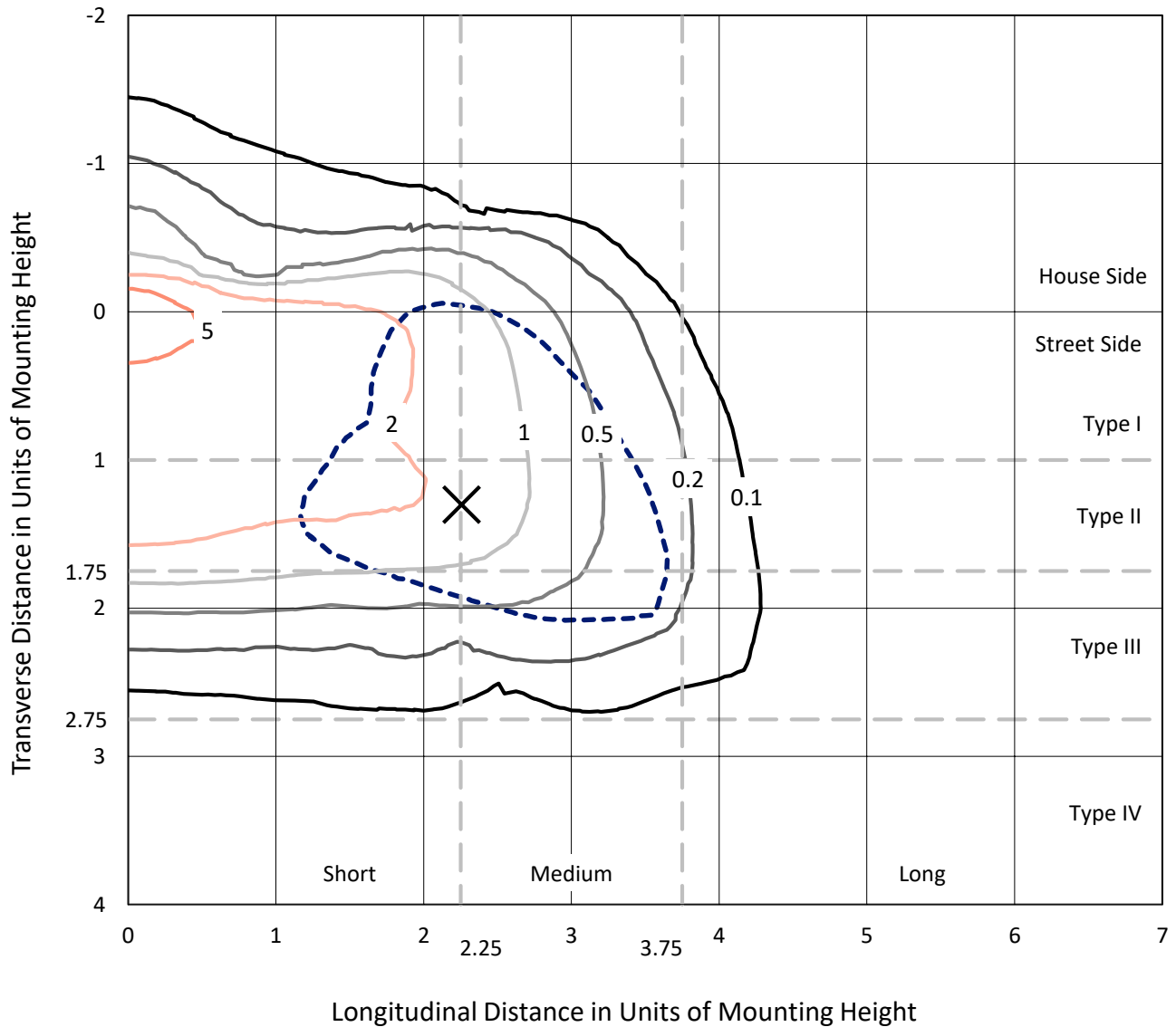
Input Watts (W): 257
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

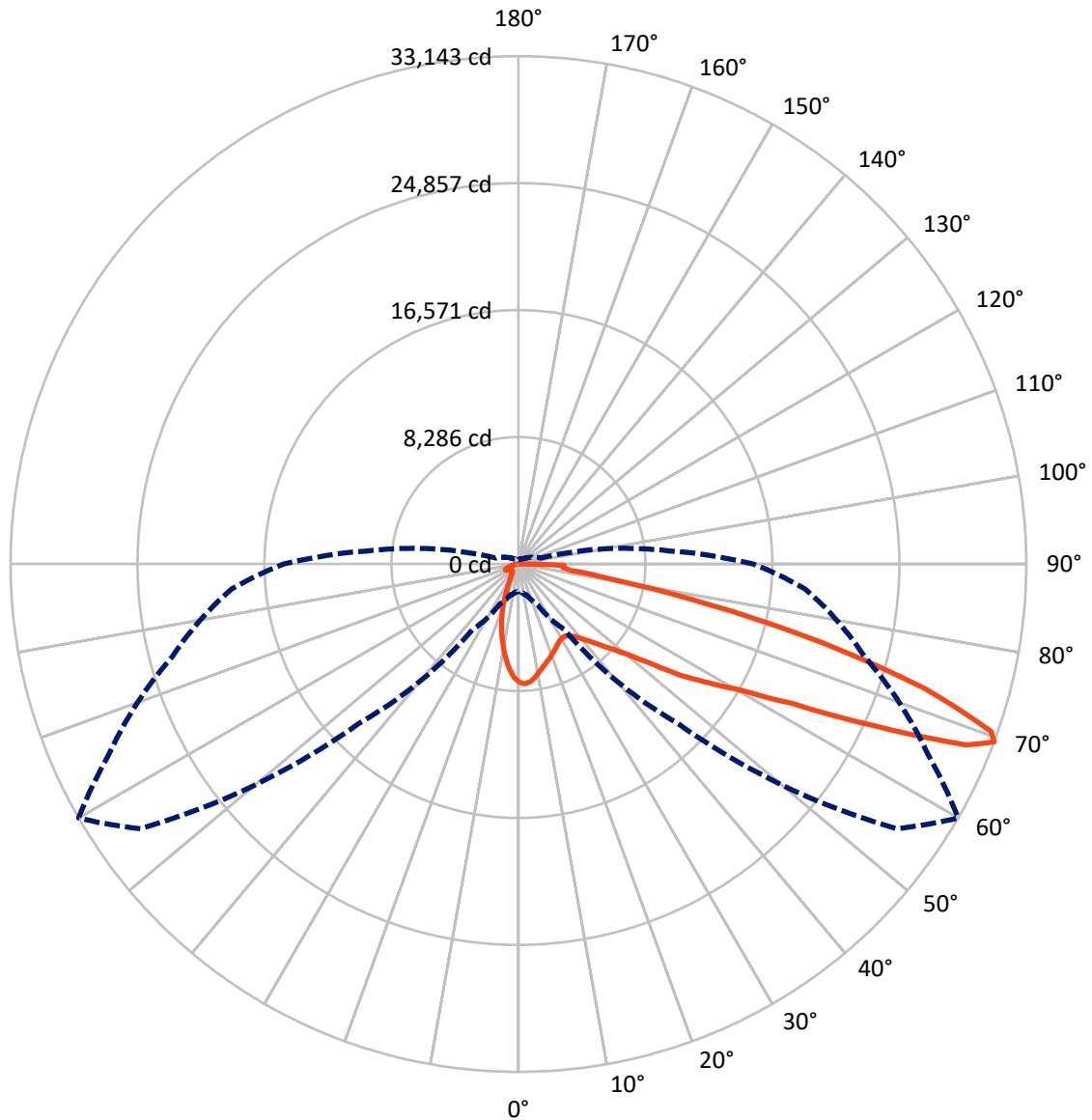
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.6 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	4310.1	0.0	4310.1
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	25985.1	0.0	25985.1
	% Fixture	85.8	0.0	85.8
Total	Lumens	30295.2	0.0	30295.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	652.7	2.2
10°-20°	1390.7	4.6
20°-30°	1772.0	5.8
30°-40°	2436.0	8.0
40°-50°	3952.7	13.0
50°-60°	6339.0	20.9
60°-70°	8436.8	27.8
70°-80°	4555.2	15.0
80°-90°	760.1	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°	30295.2	100.0
0°-180°	30295.2	100.0

Coefficient of Utilization



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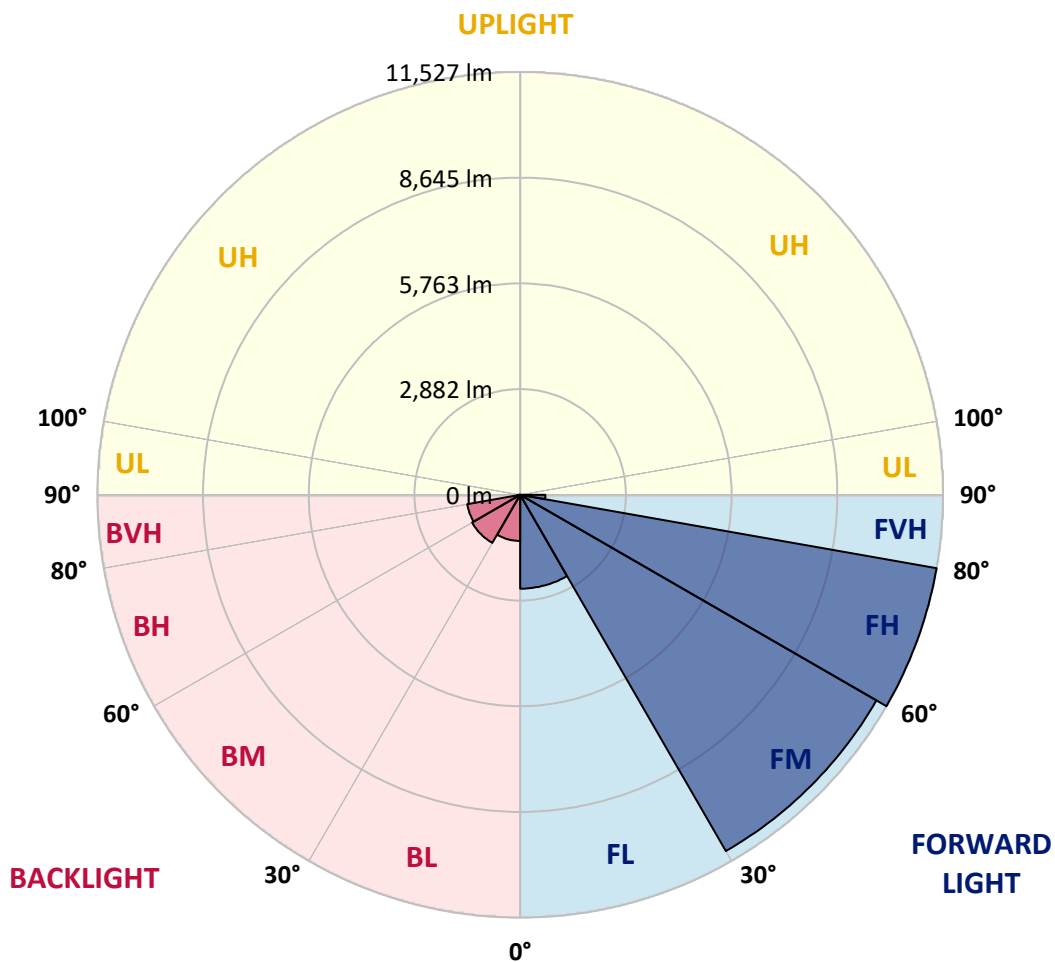
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2558.0	8.4			
FM	(30°-60°)	11213.5	37.0			
FH	(60°-80°)	11526.7	38.0			G4/12000
FVH	(80°-90°)	686.9	2.3			G4/750
BL	(0°-30°)	1257.4	4.2	B3/2500		
BM	(30°-60°)	1514.2	5.0	B2/2500		
BH	(60°-80°)	1465.3	4.8	B3/2500		G3/2500
BVH	(80°-90°)	73.2	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-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7
2.5°	7877.7	7895.3	7888.0	7883.6	7896.7	7876.3	7833.8	7820.6	7800.2	7751.9	7669.9
5°	7582.1	7634.8	7631.9	7671.4	7737.2	7754.8	7735.8	7738.7	7700.6	7640.6	7504.5
7.5°	7071.4	7093.3	7105.0	7191.4	7311.4	7408.0	7489.9	7516.3	7498.7	7447.5	7271.9
10°	6544.5	6562.1	6589.9	6690.9	6843.1	6976.2	7131.4	7220.6	7258.7	7249.9	7053.8
12.5°	6092.3	6109.9	6146.5	6260.6	6442.1	6606.0	6831.4	6942.6	7033.3	7087.5	6876.7
15°	5686.9	5725.0	5760.1	5891.8	6095.2	6310.4	6565.0	6705.5	6846.0	6967.5	6720.1
17.5°	5370.8	5408.9	5429.4	5549.4	5766.0	6029.4	6327.9	6493.3	6668.9	6867.9	6565.0
20°	5187.9	5205.5	5196.7	5264.0	5458.6	5738.2	6092.3	6284.0	6496.2	6774.3	6409.9
22.5°	5136.7	5138.2	5106.0	5098.6	5224.5	5460.1	5840.6	6073.3	6333.8	6712.8	6276.7
25°	5261.1	5256.7	5168.9	5097.2	5110.3	5247.9	5597.7	5868.4	6197.7	6699.6	6174.3
27.5°	5537.7	5550.8	5420.6	5286.0	5152.8	5148.4	5413.3	5698.7	6086.5	6759.6	6130.4
30°	5925.5	5947.4	5808.4	5637.2	5386.9	5180.6	5341.6	5597.7	6017.7	6884.0	6123.1
32.5°	6349.9	6373.3	6267.9	6087.9	5760.1	5379.6	5391.3	5606.5	6014.8	7058.2	6172.8
35°	6802.1	6828.4	6774.3	6622.1	6257.7	5746.9	5581.6	5748.4	6109.9	7324.5	6306.0
37.5°	7307.0	7348.0	7362.6	7217.7	6828.4	6231.3	5893.3	6017.7	6325.0	7694.8	6550.4
40°	8034.3	8091.4	8087.0	7879.2	7482.6	6885.5	6374.8	6407.0	6660.1	8189.4	6941.1
42.5°	9427.5	9439.2	9074.8	8622.6	8202.6	7573.3	6942.6	6916.2	7122.6	8815.8	7516.3
45°	11199.7	11151.4	10340.7	9467.0	8954.8	8363.6	7681.6	7552.8	7709.4	9579.7	8236.3
47.5°	12670.5	12559.3	11534.9	10329.0	9750.9	9222.6	8549.4	8324.1	8410.4	10446.1	9167.0
50°	13181.2	13097.8	12249.0	11046.1	10504.6	10270.5	9617.8	9298.7	9322.1	11479.3	10257.3
52.5°	13071.5	13059.8	12493.4	11518.8	11210.0	11371.0	11131.0	10699.2	10470.9	12626.6	11433.9
55°	12812.5	12837.3	12632.5	12069.0	12016.3	12433.4	13108.1	12789.0	12079.3	13784.2	12650.0
57.5°	11912.4	11976.8	12427.6	12761.2	13314.4	13934.9	14700.3	14609.6	13810.5	15035.4	14095.9
60°	9597.3	9746.5	10955.3	12626.6	14650.5	16591.1	16933.5	16722.8	15595.9	16588.1	16005.7
62.5°	6724.5	6879.7	8316.8	10931.9	14431.0	19591.1	20925.8	20017.0	18159.9	18875.5	18477.4
65°	3600.1	3674.7	4772.3	7585.0	12183.2	20210.2	26760.5	25377.6	22219.5	21695.6	20592.1
67.5°	1985.9	2026.9	2446.9	3829.8	7803.1	17796.9	30477.7	31522.6	27293.2	23573.2	20207.2
69°	1795.6	1833.7	2108.8	2900.5	5221.6	14714.9	30114.8	33142.6	29517.7	23387.3	18784.8
70°	1756.1	1791.3	2038.6	2673.7	4226.4	12129.0	28898.6	32728.5	30047.4	22721.4	17543.8
72.5°	1580.5	1618.6	1858.6	2401.5	3611.8	6047.0	22891.2	27672.3	27280.1	19700.9	13307.1
75°	1473.7	1508.8	1915.6	2351.8	3458.1	3826.9	15091.0	20394.6	20053.6	13781.3	7175.3
77.5°	630.7	627.8	888.3	1990.3	3509.3	3705.4	8108.9	12740.7	11624.1	5890.4	2060.5
80°	421.5	414.2	421.5	585.4	3218.1	3725.9	4248.4	6467.0	4885.0	1501.5	1015.6
82.5°	362.9	357.1	370.3	357.1	1131.2	4252.8	3611.8	3439.1	2322.5	853.2	503.4
85°	244.4	234.2	319.0	320.5	534.2	3778.6	4068.4	2904.9	1879.1	506.4	248.8
87.5°	117.1	114.1	185.9	226.8	313.2	1535.2	4564.5	2976.6	1895.2	259.0	118.5
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°	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7	7719.7
2.5°	7645.0	7585.0	7526.5	7456.2	7383.1	7301.1	7260.1	7219.2	7208.9	7197.2	7156.2
5°	7434.3	7349.4	7203.1	7042.1	6872.3	6707.0	6581.1	6502.1	6442.1	6411.4	6357.2
7.5°	7162.1	7037.7	6781.6	6503.5	6218.2	5957.7	5732.3	5590.4	5455.7	5392.8	5321.1
10°	6903.1	6717.2	6319.2	5909.4	5499.6	5106.0	4735.7	4473.7	4241.1	4110.8	4018.6
12.5°	6680.6	6426.0	5874.3	5319.6	4757.7	4197.2	3642.5	3206.4	2842.0	2650.3	2552.2
15°	6464.0	6156.7	5451.3	4747.4	4025.9	3263.5	2534.7	2040.0	1738.6	1618.6	1577.6
17.5°	6267.9	5874.3	5026.9	4170.8	3270.8	2348.8	1703.4	1431.2	1315.6	1276.1	1263.0
20°	6055.7	5588.9	4586.4	3567.9	2483.5	1642.0	1330.3	1210.3	1163.4	1151.7	1145.9
22.5°	5850.9	5307.9	4165.0	2922.5	1783.9	1267.3	1143.0	1093.2	1085.9	1096.1	1096.1
25°	5676.7	5056.2	3709.8	2247.9	1309.8	1066.9	1022.9	1011.2	1039.0	1077.1	1084.4
27.5°	5546.5	4849.9	3225.4	1659.5	1043.4	927.8	926.4	945.4	1014.2	1087.3	1102.0
30°	5457.2	4653.8	2707.4	1197.1	875.1	816.6	840.0	881.0	982.0	1085.9	1113.7
32.5°	5411.8	4508.9	2167.4	926.4	749.3	717.1	756.6	806.4	905.9	1002.5	1039.0
35°	5446.9	4402.0	1658.1	772.7	661.5	636.6	677.6	725.9	784.4	825.4	853.2
37.5°	5578.7	4359.6	1251.2	692.2	601.5	578.1	610.3	638.1	661.5	673.2	686.4
40°	5862.6	4405.0	1002.5	651.2	567.8	538.5	551.7	562.0	576.6	588.3	594.2
42.5°	6281.1	4541.1	898.6	635.1	550.3	507.8	504.9	509.3	528.3	550.3	554.6
45°	6866.5	4781.1	891.2	645.4	541.5	482.9	469.8	475.6	504.9	538.5	544.4
47.5°	7614.3	5146.9	949.8	676.1	548.8	469.8	447.8	455.1	491.7	537.1	544.4
50°	8520.2	5657.7	1047.8	721.5	581.0	472.7	440.5	444.9	482.9	532.7	540.0
52.5°	9590.0	6382.1	1154.7	765.4	614.6	491.7	446.4	436.1	471.2	515.1	523.9
55°	10779.7	7311.4	1264.4	804.9	632.2	515.1	458.1	424.4	449.3	485.9	493.2
57.5°	12240.2	8610.9	1454.7	842.9	643.9	531.2	469.8	412.7	421.5	447.8	453.7
60°	14217.4	10449.0	1789.8	905.9	670.3	537.1	468.3	402.4	393.7	408.3	411.2
62.5°	16586.7	12445.1	2069.3	984.9	714.2	541.5	459.5	395.1	370.3	370.3	373.2
65°	17993.0	12979.3	1914.2	1050.8	750.7	537.1	449.3	387.8	352.7	336.6	338.1
67.5°	16800.3	11414.9	1640.5	1063.9	749.3	516.6	433.2	374.6	335.1	310.3	308.8
69°	15306.2	9849.0	1517.6	1028.8	714.2	490.3	412.7	360.0	322.0	295.6	294.2
70°	14101.8	8893.4	1437.1	990.8	676.1	471.2	396.6	346.8	311.7	286.8	283.9
72.5°	10252.9	5827.4	1227.8	851.7	557.6	395.1	342.4	304.4	278.1	263.4	260.5
75°	5123.5	2779.1	996.6	690.7	427.3	316.1	281.0	254.6	241.5	238.5	237.1
77.5°	1683.0	1273.2	712.7	515.1	317.6	247.3	226.8	207.8	204.9	213.7	210.7
80°	924.9	740.5	452.2	341.0	216.6	181.5	178.5	168.3	172.7	187.3	184.4
82.5°	471.2	384.9	279.5	204.9	146.3	130.2	142.0	136.1	142.0	155.1	153.7
85°	232.7	210.7	177.1	124.4	96.6	83.4	101.0	105.4	108.3	118.5	118.5
87.5°	134.6	124.4	93.7	58.5	48.3	43.9	58.5	57.1	67.3	73.2	71.7
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)