

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: P299990

Luminaire Tested: **GLNA-AF-10-LED-E1-SL3-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299990
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-10-LED-E1-SL3-7030-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(10) 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: 37415.6 lumens
Efficiency: N/A
Efficacy: 115.8 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

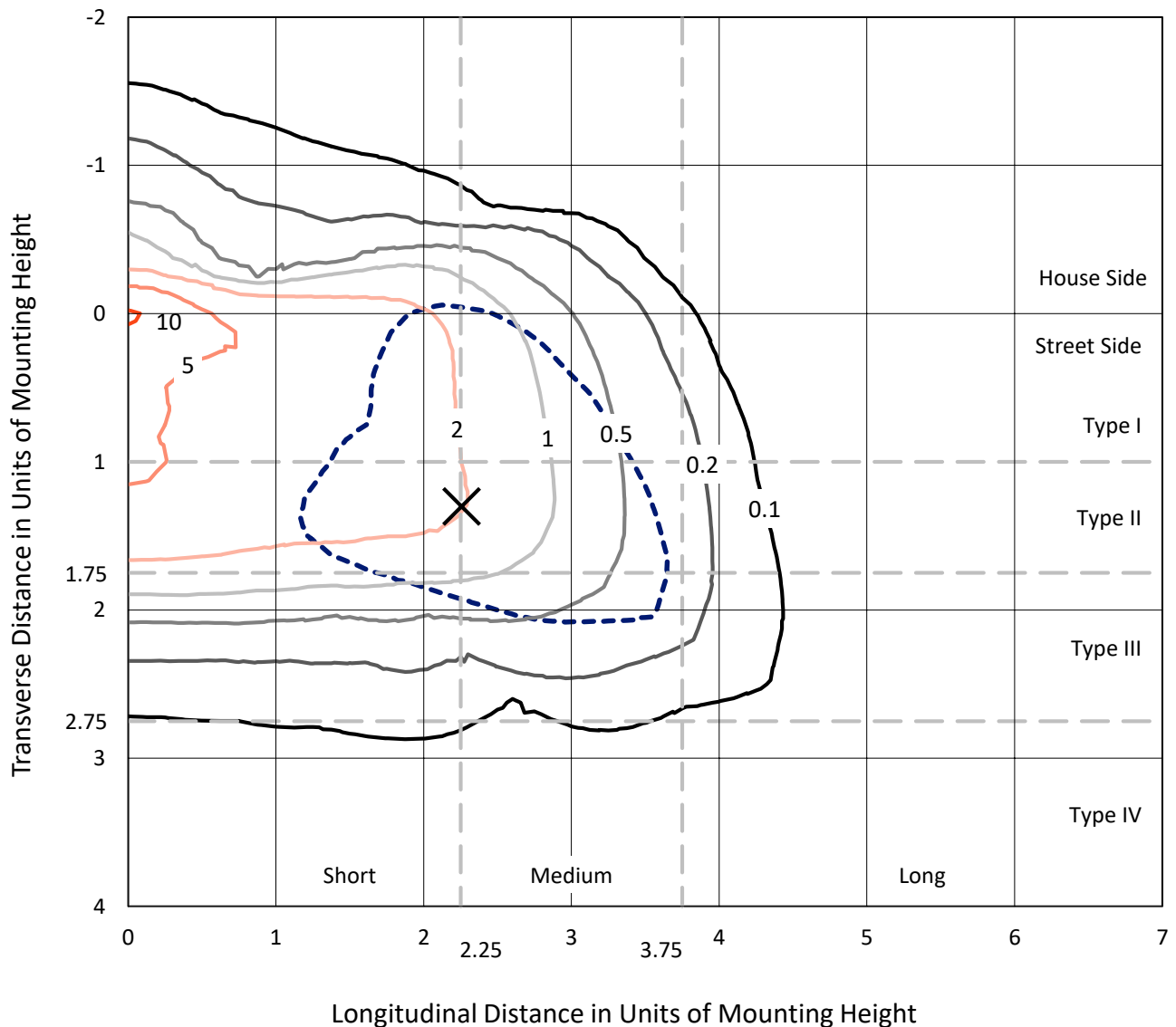
Input Watts (W): 323
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299990
 CATALOG NUMBER: GLNA-AF-10-LED-E1-SL3-7030-600

Iso-Footcandle Lines of Horizontal Illumination

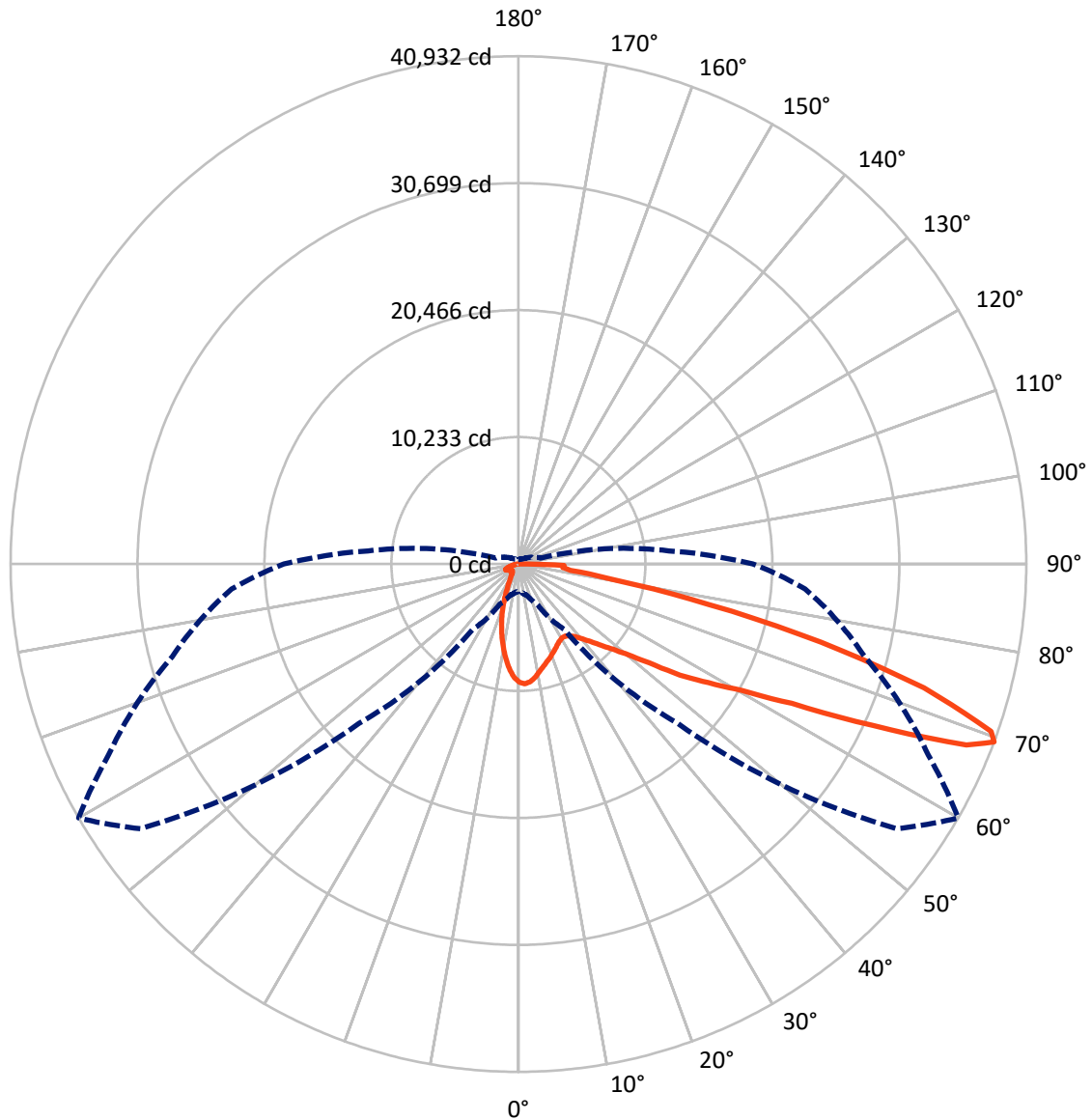
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.6 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P299990
CATALOG NUMBER: GLNA-AF-10-LED-E1-SL3-7030-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299990

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL3-7030-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5323.1	0.0	5323.1
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	32092.6	0.0	32092.6
	% Fixture	85.8	0.0	85.8
Total	Lumens	37415.6	0.0	37415.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	806.1	2.2
10°-20°	1717.5	4.6
20°-30°	2188.5	5.8
30°-40°	3008.6	8.0
40°-50°	4881.7	13.0
50°-60°	7829.0	20.9
60°-70°	10419.8	27.8
70°-80°	5625.9	15.0
80°-90°	938.7	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°	37415.6	100.0
0°-180°	37415.6	100.0

Coefficient of Utilization



REPORT NUMBER: P299990

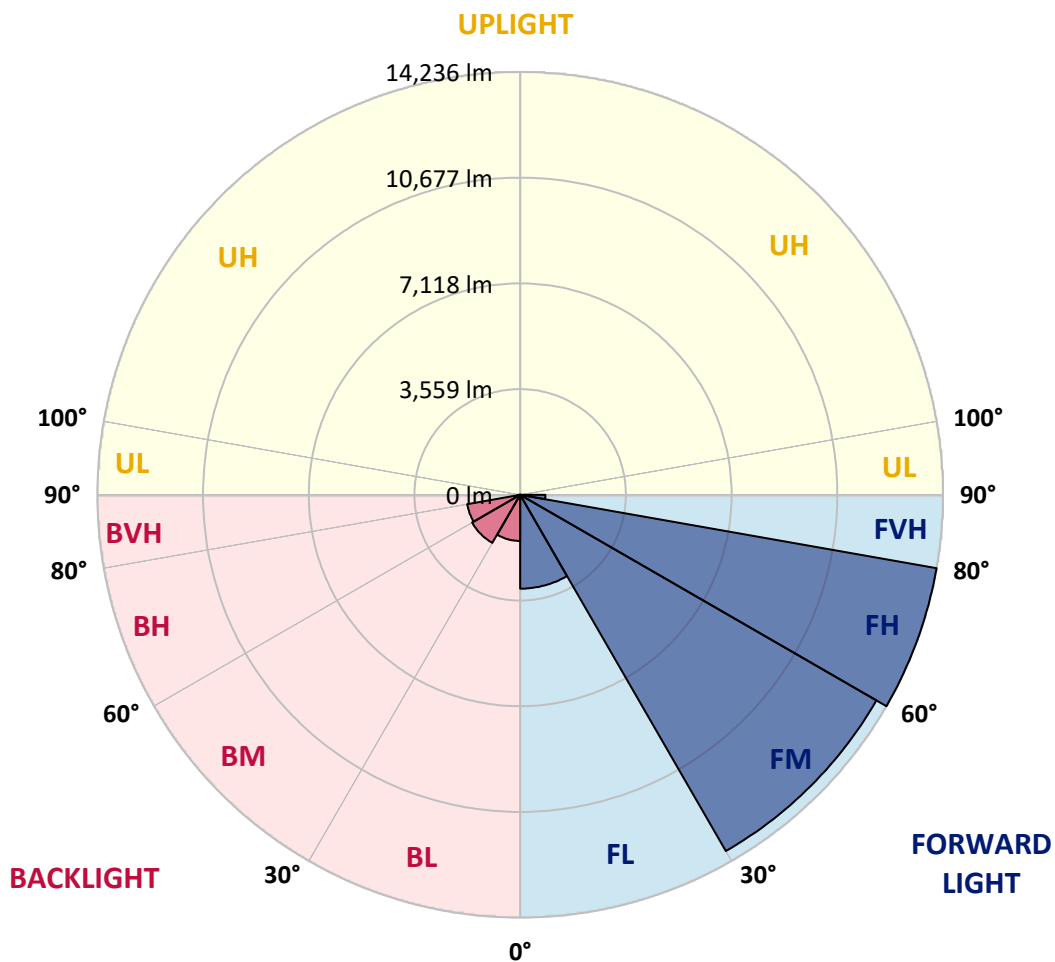
CATALOG NUMBER: GLNA-AF-10-LED-E1-SL3-7030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3159.2	8.4			
FM (30°-60°)	13849.1	37.0			
FH (60°-80°)	14235.9	38.0			G5
FVH (80°-90°)	848.3	2.3			G5
BL (0°-30°)	1552.9	4.2	B3/2500		
BM (30°-60°)	1870.1	5.0	B2/2500		
BH (60°-80°)	1809.7	4.8	B3/2500		G3/2500
BVH (80°-90°)	90.4	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





REPORT NUMBER: P299990

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL3-7030-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1
2.5°	9729.3	9751.0	9741.9	9736.5	9752.8	9727.5	9675.1	9658.8	9633.5	9573.8	9472.6
5°	9364.2	9429.2	9425.6	9474.4	9555.8	9577.5	9554.0	9557.6	9510.6	9436.5	9268.4
7.5°	8733.4	8760.5	8775.0	8881.6	9029.8	9149.1	9250.3	9282.8	9261.2	9197.9	8981.0
10°	8082.7	8104.4	8138.8	8263.5	8451.4	8615.9	8807.5	8917.7	8964.7	8953.9	8711.7
12.5°	7524.2	7545.9	7591.1	7732.1	7956.2	8158.6	8437.0	8574.3	8686.4	8753.3	8493.0
15°	7023.6	7070.6	7114.0	7276.6	7527.9	7793.5	8108.0	8281.5	8455.1	8605.1	8299.6
17.5°	6633.2	6680.2	6705.5	6853.7	7121.2	7446.5	7815.2	8019.5	8236.4	8482.2	8108.0
20°	6407.3	6428.9	6418.1	6501.2	6741.6	7086.8	7524.2	7761.0	8023.1	8366.5	7916.4
22.5°	6344.0	6345.8	6306.0	6297.0	6452.4	6743.4	7213.4	7500.7	7822.5	8290.6	7752.0
25°	6497.6	6492.2	6383.8	6295.2	6311.5	6481.4	6913.3	7247.7	7654.4	8274.3	7625.5
27.5°	6839.2	6855.5	6694.6	6528.4	6363.9	6358.5	6685.6	7038.0	7517.0	8348.4	7571.2
30°	7318.2	7345.3	7173.6	6962.1	6653.1	6398.2	6597.0	6913.3	7432.1	8502.0	7562.2
32.5°	7842.3	7871.3	7741.1	7518.8	7114.0	6644.0	6658.5	6924.2	7428.4	8717.1	7623.6
35°	8400.8	8433.4	8366.5	8178.5	7728.5	7097.7	6893.5	7099.5	7545.9	9046.1	7788.1
37.5°	9024.4	9075.0	9093.1	8914.1	8433.4	7695.9	7278.4	7432.1	7811.6	9503.3	8090.0
40°	9922.7	9993.2	9987.7	9731.1	9241.3	8503.9	7873.1	7912.8	8225.5	10114.3	8572.5
42.5°	11643.3	11657.8	11207.7	10649.2	10130.5	9353.3	8574.3	8541.8	8796.7	10887.8	9282.8
45°	13832.1	13772.4	12771.1	11692.1	11059.5	10329.3	9487.1	9328.0	9521.4	11831.3	10172.1
47.5°	15648.5	15511.2	14246.0	12756.7	12042.8	11390.3	10558.9	10280.5	10387.2	12901.3	11321.6
50°	16279.3	16176.3	15128.0	13642.3	12973.6	12684.4	11878.3	11484.3	11513.2	14177.3	12668.1
52.5°	16143.8	16129.3	15429.8	14226.1	13844.7	14043.6	13747.1	13214.0	12932.0	15594.3	14121.3
55°	15823.9	15854.6	15601.5	14905.7	14840.6	15355.7	16188.9	15794.9	14918.3	17024.0	15623.2
57.5°	14712.3	14791.8	15348.5	15760.6	16443.8	17210.1	18155.4	18043.3	17056.5	18569.3	17408.9
60°	11853.0	12037.3	13530.3	15594.3	18094.0	20490.6	20913.5	20653.2	19261.5	20487.0	19767.6
62.5°	8305.0	8496.6	10271.5	13501.3	17822.8	24195.8	25844.1	24721.7	22428.1	23311.9	22820.3
65°	4446.2	4538.4	5894.0	9367.8	15046.7	24960.3	33050.3	31342.3	27441.9	26794.8	25432.0
67.5°	2452.7	2503.3	3022.0	4730.0	9637.1	21979.9	37641.1	38931.6	33708.1	29113.7	24956.7
69°	2217.7	2264.7	2604.5	3582.3	6448.8	18173.5	37192.8	40932.4	36455.4	28884.2	23199.9
70°	2168.9	2212.3	2517.7	3302.1	5219.8	14979.8	35690.9	40420.9	37109.7	28061.8	21667.2
72.5°	1952.0	1999.0	2295.4	2966.0	4460.7	7468.2	28271.5	34176.3	33691.9	24331.3	16434.8
75°	1820.1	1863.4	2365.9	2904.5	4270.9	4726.4	18638.0	25188.0	24766.9	17020.4	8861.7
77.5°	779.0	775.4	1097.1	2458.1	4334.2	4576.4	10014.8	15735.3	14356.2	7274.8	2544.8
80°	520.5	511.5	520.5	723.0	3974.5	4601.7	5246.9	7986.9	6033.1	1854.4	1254.3
82.5°	448.2	441.0	457.3	441.0	1397.1	5252.3	4460.7	4247.4	2868.4	1053.7	621.7
85°	301.8	289.2	394.0	395.8	659.7	4666.7	5024.6	3587.7	2320.7	625.4	307.3
87.5°	144.6	141.0	229.5	280.1	386.8	1896.0	5637.3	3676.3	2340.6	319.9	146.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299990

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL3-7030-600

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1	9534.1
2.5°	9441.9	9367.8	9295.5	9208.7	9118.4	9017.2	8966.5	8915.9	8903.3	8888.8	8838.2
5°	9181.6	9076.8	8896.1	8697.2	8487.6	8283.3	8127.9	8030.3	7956.2	7918.3	7851.4
7.5°	8845.5	8691.8	8375.5	8032.1	7679.7	7358.0	7079.6	6904.3	6738.0	6660.3	6571.7
10°	8525.5	8296.0	7804.4	7298.3	6792.2	6306.0	5848.8	5525.2	5237.9	5077.0	4963.1
12.5°	8250.8	7936.3	7254.9	6569.9	5875.9	5183.6	4498.6	3960.0	3510.0	3273.2	3152.1
15°	7983.3	7603.8	6732.6	5863.2	4972.2	4030.5	3130.4	2519.5	2147.2	1999.0	1948.4
17.5°	7741.1	7254.9	6208.4	5151.1	4039.6	2900.9	2103.8	1767.6	1624.9	1576.1	1559.8
20°	7479.1	6902.5	5664.4	4406.5	3067.2	2027.9	1642.9	1494.7	1436.9	1422.4	1415.2
22.5°	7226.0	6555.5	5143.9	3609.4	2203.2	1565.2	1411.6	1350.1	1341.1	1353.7	1353.7
25°	7010.9	6244.6	4581.8	2776.2	1617.6	1317.6	1263.4	1248.9	1283.3	1330.3	1339.3
27.5°	6850.1	5989.7	3983.5	2049.6	1288.7	1145.9	1144.1	1167.6	1252.5	1342.9	1361.0
30°	6739.8	5747.6	3343.7	1478.5	1080.8	1008.5	1037.5	1088.1	1212.8	1341.1	1375.4
32.5°	6683.8	5568.6	2676.8	1144.1	925.4	885.6	934.4	995.9	1118.8	1238.1	1283.3
35°	6727.2	5436.7	2047.8	954.3	816.9	786.2	836.8	896.5	968.8	1019.4	1053.7
37.5°	6889.8	5384.3	1545.3	854.9	742.8	713.9	753.7	788.0	816.9	831.4	847.7
40°	7240.5	5440.3	1238.1	804.3	701.3	665.1	681.4	694.0	712.1	726.6	733.8
42.5°	7757.4	5608.4	1109.7	784.4	679.6	627.2	623.6	629.0	652.5	679.6	685.0
45°	8480.4	5904.8	1100.7	797.1	668.7	596.4	580.2	587.4	623.6	665.1	672.4
47.5°	9403.9	6356.7	1173.0	835.0	677.8	580.2	553.1	562.1	607.3	663.3	672.4
50°	10522.7	6987.4	1294.1	891.1	717.5	583.8	544.0	549.5	596.4	657.9	666.9
52.5°	11843.9	7882.1	1426.0	945.3	759.1	607.3	551.3	538.6	582.0	636.2	647.1
55°	13313.4	9029.8	1561.6	994.1	780.8	636.2	565.7	524.1	554.9	600.1	609.1
57.5°	15117.2	10634.8	1796.6	1041.1	795.3	656.1	580.2	509.7	520.5	553.1	560.3
60°	17559.0	12904.9	2210.5	1118.8	827.8	663.3	578.4	497.0	486.2	504.3	507.9
62.5°	20485.2	15370.2	2555.7	1216.4	882.0	668.7	567.5	488.0	457.3	457.3	460.9
65°	22222.1	16029.9	2364.1	1297.7	927.2	663.3	554.9	479.0	435.6	415.7	417.5
67.5°	20749.0	14097.8	2026.1	1314.0	925.4	638.0	535.0	462.7	413.9	383.2	381.4
69°	18903.7	12163.9	1874.3	1270.6	882.0	605.5	509.7	444.6	397.6	365.1	363.3
70°	17416.2	10983.6	1774.9	1223.6	835.0	582.0	489.8	428.4	385.0	354.3	350.6
72.5°	12662.7	7197.1	1516.4	1051.9	688.6	488.0	422.9	375.9	343.4	325.3	321.7
75°	6327.7	3432.3	1230.8	853.1	527.8	390.4	347.0	314.5	298.2	294.6	292.8
77.5°	2078.5	1572.4	880.2	636.2	392.2	305.5	280.1	256.7	253.0	263.9	260.3
80°	1142.3	914.5	558.5	421.1	267.5	224.1	220.5	207.9	213.3	231.3	227.7
82.5°	582.0	475.3	345.2	253.0	180.7	160.9	175.3	168.1	175.3	191.6	189.8
85°	287.4	260.3	218.7	153.6	119.3	103.0	124.7	130.1	133.7	146.4	146.4
87.5°	166.3	153.6	115.7	72.3	59.6	54.2	72.3	70.5	83.1	90.4	88.6
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)