

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: P302888

Luminaire Tested: **GLNA-AF-02-LED-E1-T4W-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302888
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-T4W-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6898.2 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

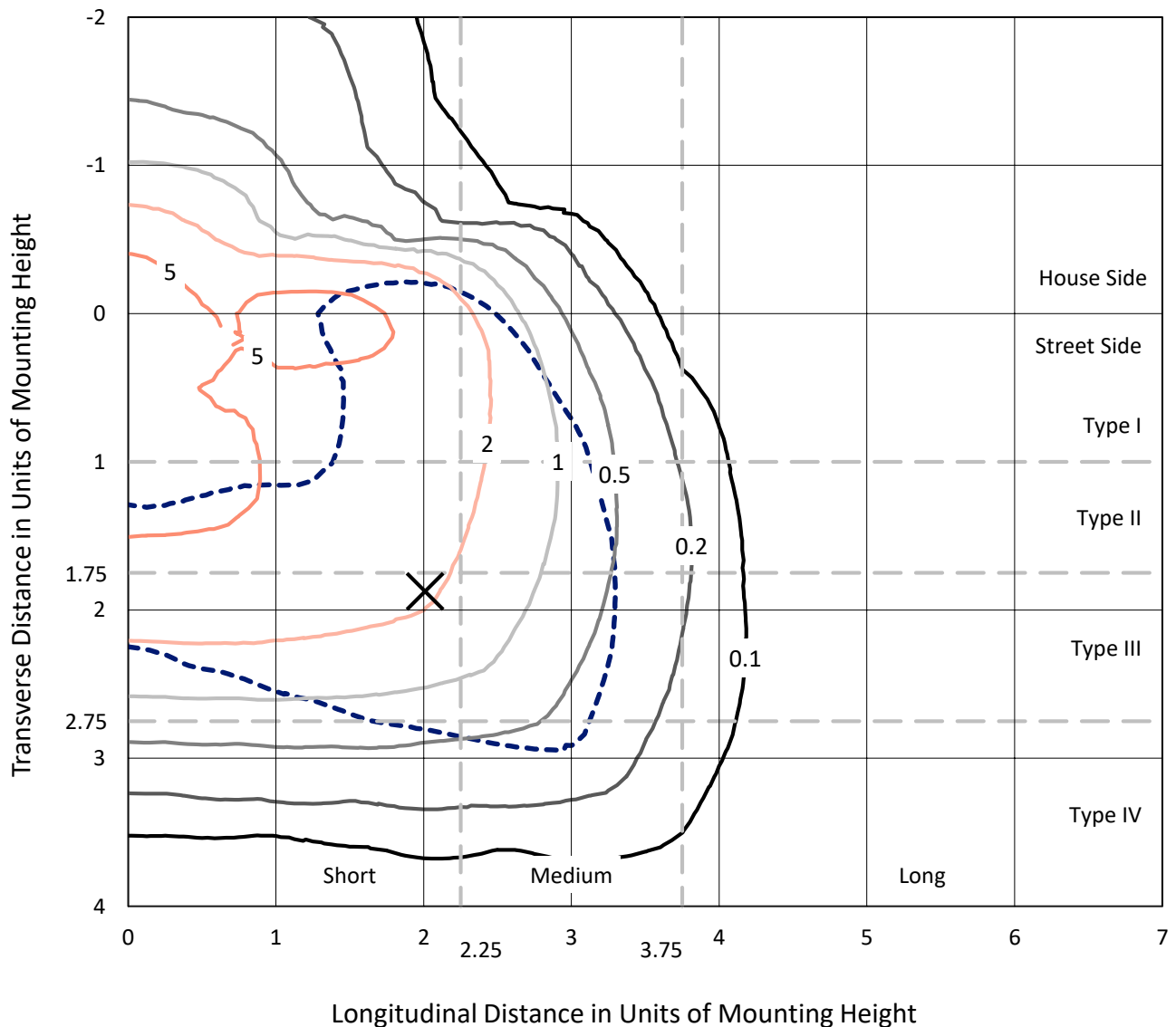
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

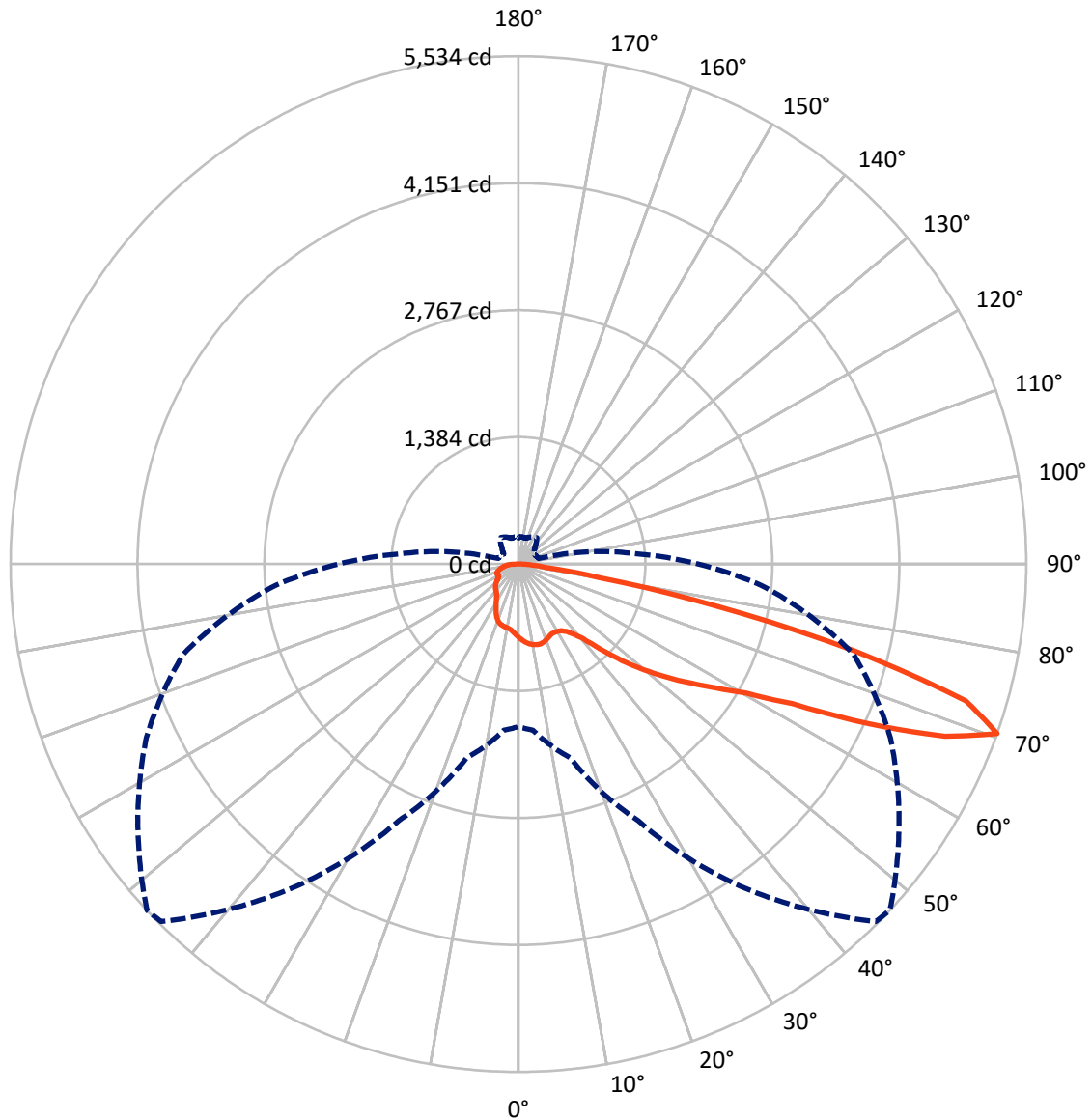
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1439.1	0.0	1439.1
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	5459.1	0.0	5459.1
	% Fixture	79.1	0.0	79.1
Total	Lumens	6898.2	0.0	6898.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	1.1
10°-20°	225.0	3.3
20°-30°	332.3	4.8
30°-40°	482.9	7.0
40°-50°	869.1	12.6
50°-60°	1505.6	21.8
60°-70°	2149.0	31.2
70°-80°	1103.2	16.0
80°-90°	154.4	2.2
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°	6898.2	100.0
0°-180°	6898.2	100.0

Coefficient of Utilization



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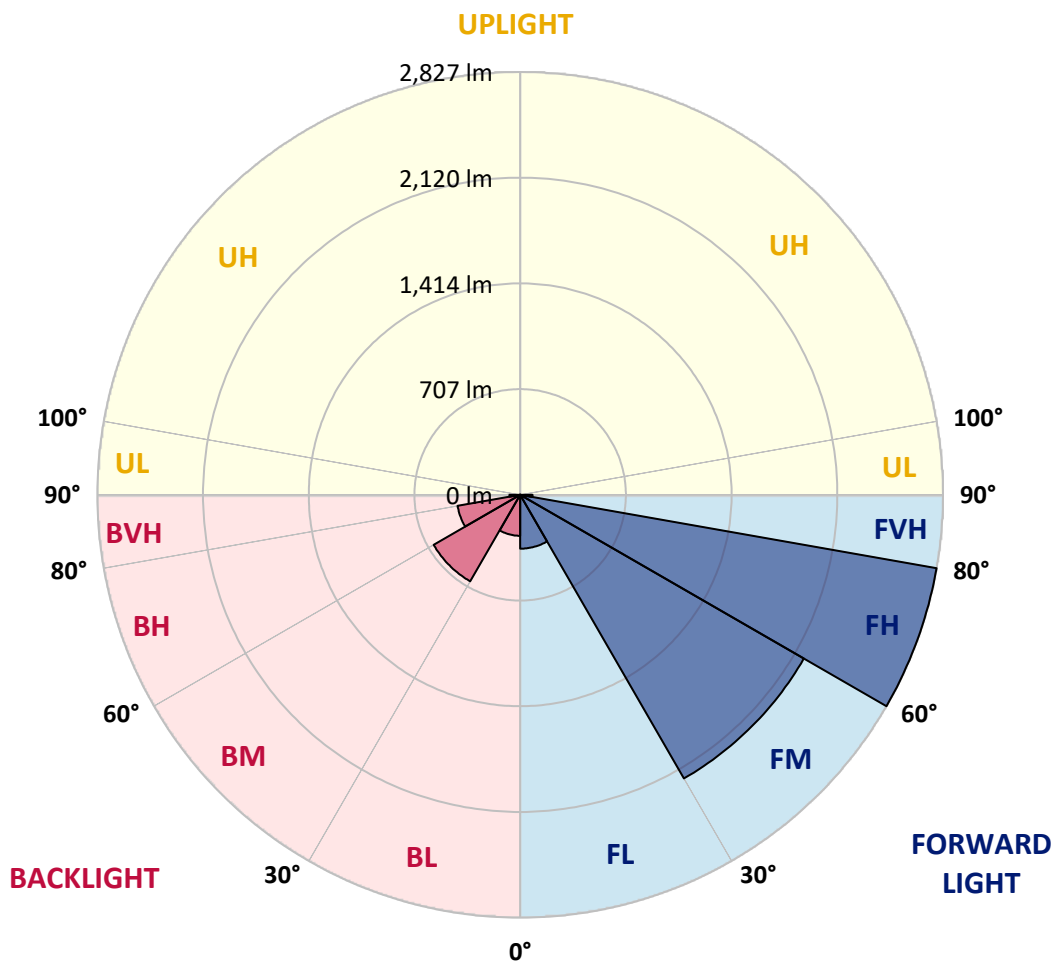
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	359.9	5.2			
FM	(30°-60°)	2189.7	31.7			
FH	(60°-80°)	2827.1	41.0			G2/5000
FVH	(80°-90°)	82.4	1.2			G1/100
BL	(0°-30°)	274.0	4.0	B1/500		
BM	(30°-60°)	668.0	9.7	B1/1000		
BH	(60°-80°)	425.1	6.2	B1/500		G1/500
BVH	(80°-90°)	72.0	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4
2.5°	847.4	845.8	845.1	843.7	842.1	833.6	831.9	825.9	817.6	808.7	799.7
5°	903.2	902.8	899.0	892.3	881.6	863.1	858.8	844.1	824.2	805.1	786.0
7.5°	952.1	949.1	942.1	928.6	909.8	884.7	878.6	858.1	830.9	804.7	778.9
10°	988.0	986.3	970.9	952.4	927.9	900.0	893.0	870.2	840.3	807.1	774.9
12.5°	1008.5	1005.1	987.3	965.2	936.0	908.8	901.7	878.6	845.1	807.1	769.2
15°	1007.1	1004.8	987.0	962.8	933.4	909.5	903.2	880.0	844.1	803.7	761.8
17.5°	980.3	981.3	966.2	942.4	918.2	900.0	894.3	872.9	837.3	797.0	753.1
20°	933.4	938.0	927.9	906.8	893.3	881.0	877.3	859.1	826.9	787.3	743.7
22.5°	886.3	890.7	886.7	868.8	866.8	859.5	857.5	844.4	817.9	781.3	738.0
25°	851.8	855.8	855.1	839.6	845.8	845.4	843.7	837.3	815.9	781.3	739.0
27.5°	842.4	843.7	842.4	828.3	836.6	843.4	842.1	841.0	821.9	791.0	751.8
30°	874.6	872.6	862.1	833.6	841.4	850.8	849.4	850.1	840.0	816.5	780.3
32.5°	1003.1	994.0	961.1	881.0	860.5	865.5	866.1	877.3	879.0	855.8	824.6
35°	1195.4	1185.4	1142.7	1007.8	919.9	902.5	902.5	919.2	929.2	912.2	893.3
37.5°	1399.1	1388.0	1365.3	1183.7	1044.7	966.6	964.9	976.6	991.0	995.1	999.8
40°	1630.6	1618.9	1625.3	1381.0	1218.9	1077.6	1053.7	1045.4	1084.3	1110.1	1147.8
42.5°	1884.1	1878.6	1881.0	1600.8	1417.2	1243.8	1209.9	1166.5	1213.6	1259.5	1338.4
45°	2118.6	2123.3	2121.0	1836.1	1638.1	1446.4	1410.5	1326.6	1372.6	1451.4	1580.0
47.5°	2324.0	2304.5	2334.7	2093.1	1885.4	1673.3	1629.0	1516.6	1563.2	1660.5	1878.0
50°	2573.4	2570.7	2526.4	2436.2	2184.4	1901.2	1843.1	1712.9	1785.4	1920.7	2253.6
52.5°	2835.5	2786.8	2746.2	2702.9	2501.6	2134.8	2063.6	1908.5	2046.5	2216.6	2711.4
55°	2889.1	2867.4	2917.7	2990.6	2807.3	2377.4	2294.5	2153.8	2340.5	2555.0	3239.2
57.5°	3003.9	3003.6	3107.7	3237.6	3122.1	2634.8	2551.2	2450.2	2671.0	2942.5	3799.6
60°	3081.5	3103.2	3296.6	3548.6	3431.2	2932.2	2855.2	2792.2	3047.0	3375.8	4321.8
62.5°	3122.1	3151.6	3415.4	3674.8	3868.1	3427.1	3350.3	3259.4	3544.3	3851.0	4627.2
65°	2953.3	3011.3	3396.9	3783.9	4250.7	4229.5	4195.0	4035.3	4166.1	4226.5	4516.9
67.5°	2486.1	2545.5	2994.6	3682.2	4523.9	5003.5	5010.9	4738.0	4548.8	4258.7	3797.6
70°	1771.3	1817.9	2189.5	3087.2	4315.8	5509.2	5534.4	5061.8	4472.5	3776.8	2653.3
72.5°	841.0	869.5	1221.3	2009.3	3424.8	5047.8	5096.5	4648.4	3803.0	2796.2	1447.4
75°	309.1	317.8	412.7	854.8	1986.4	3722.5	3779.9	3332.2	2521.0	1392.1	551.4
77.5°	185.2	190.9	231.6	360.8	781.3	2127.8	2212.6	1812.2	1101.8	518.2	271.2
80°	129.5	133.5	166.1	224.5	369.2	810.9	886.3	739.6	438.9	327.9	197.3
82.5°	87.6	89.6	116.8	151.7	245.3	289.6	312.4	328.9	296.0	244.0	125.2
85°	57.4	59.4	79.2	100.0	156.0	149.7	153.0	193.6	216.1	165.7	69.4
87.5°	32.9	34.2	47.7	53.4	76.6	63.4	64.1	102.0	138.3	111.8	42.2
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°	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4	800.4
2.5°	797.4	793.0	783.3	777.2	771.5	770.2	767.8	767.5	767.2	767.2	766.2
5°	779.5	772.2	757.1	748.7	741.6	741.0	740.6	742.3	743.0	743.7	742.7
7.5°	768.2	758.1	739.3	727.3	718.9	716.8	720.2	727.9	733.0	735.0	734.0
10°	761.2	748.7	726.9	713.8	706.8	705.8	710.1	719.2	729.6	733.6	733.3
12.5°	753.1	739.0	715.8	702.1	698.1	700.1	705.8	714.1	724.9	731.3	731.6
15°	745.0	728.6	704.8	692.7	691.0	693.7	699.1	705.4	713.8	720.2	720.9
17.5°	735.3	718.1	694.4	681.9	680.6	681.9	682.2	685.6	691.0	697.1	698.7
20°	724.9	707.4	682.6	670.2	664.2	658.8	652.7	653.4	655.0	661.2	662.5
22.5°	717.5	700.1	673.5	656.4	640.3	624.2	612.1	610.5	611.1	616.1	617.8
25°	718.1	699.7	671.2	641.7	606.4	580.6	564.4	561.8	561.4	565.1	567.5
27.5°	731.3	712.8	679.9	626.5	569.6	531.2	514.2	512.2	509.5	510.5	513.2
30°	760.5	743.3	701.1	611.1	529.5	483.0	465.1	463.1	459.4	457.8	459.8
32.5°	808.1	794.0	732.0	596.3	489.6	441.6	423.5	419.2	416.9	414.9	416.5
35°	887.3	881.3	773.2	580.3	454.4	409.7	393.3	386.7	383.3	387.0	389.7
37.5°	1011.5	1014.8	827.2	555.1	427.2	388.7	374.8	367.1	362.1	365.1	368.1
40°	1187.4	1189.7	887.0	519.5	403.7	376.2	361.5	354.4	347.3	342.0	341.6
42.5°	1418.2	1394.5	945.7	480.9	376.5	368.5	352.1	343.3	332.6	317.8	314.8
45°	1692.1	1608.6	990.3	436.6	346.0	359.1	341.6	329.6	312.8	296.7	295.0
47.5°	2007.6	1838.4	1012.2	390.7	317.4	345.3	328.9	309.7	288.6	280.5	279.5
50°	2392.8	2111.3	1022.5	346.0	292.7	327.2	310.4	287.9	270.2	268.5	267.5
52.5°	2831.5	2439.5	1026.0	309.4	272.2	303.7	295.4	273.5	259.4	260.8	260.8
55°	3290.6	2778.5	980.3	282.9	253.3	279.5	285.2	267.8	256.0	261.5	263.5
57.5°	3712.0	3078.8	836.6	262.5	235.6	261.1	281.5	273.2	265.2	286.9	288.2
60°	4035.6	3256.3	624.8	244.0	222.5	254.7	291.4	293.7	295.7	347.6	354.8
62.5°	4103.4	3197.3	429.6	229.6	216.5	260.1	309.1	309.4	307.1	343.3	347.6
65°	3792.3	2823.7	312.4	221.5	211.4	269.8	324.2	317.1	301.7	329.3	321.1
67.5°	3011.6	2127.4	260.1	215.5	204.1	269.2	340.3	324.2	298.7	322.6	309.4
70°	1954.9	1286.3	231.6	210.4	195.3	256.4	349.6	323.6	289.9	300.0	284.6
72.5°	953.8	575.2	212.4	203.1	186.2	238.6	349.3	317.4	280.9	280.2	271.8
75°	373.2	263.5	194.9	191.9	170.9	218.5	340.0	308.7	270.2	259.4	256.4
77.5°	218.5	187.9	172.9	175.5	152.4	198.3	326.2	293.7	255.4	242.6	239.3
80°	159.1	140.7	147.3	151.7	130.2	178.2	307.7	275.2	239.0	245.3	240.6
82.5°	102.0	90.6	119.5	123.8	108.4	157.7	287.6	255.7	215.8	195.9	191.3
85°	52.1	57.4	88.9	94.3	83.6	129.5	263.2	229.9	189.6	163.1	165.7
87.5°	29.2	39.2	56.7	63.4	59.1	99.6	213.4	189.6	154.7	125.8	110.8
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)