

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: P299095

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-SL2-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5286.3 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

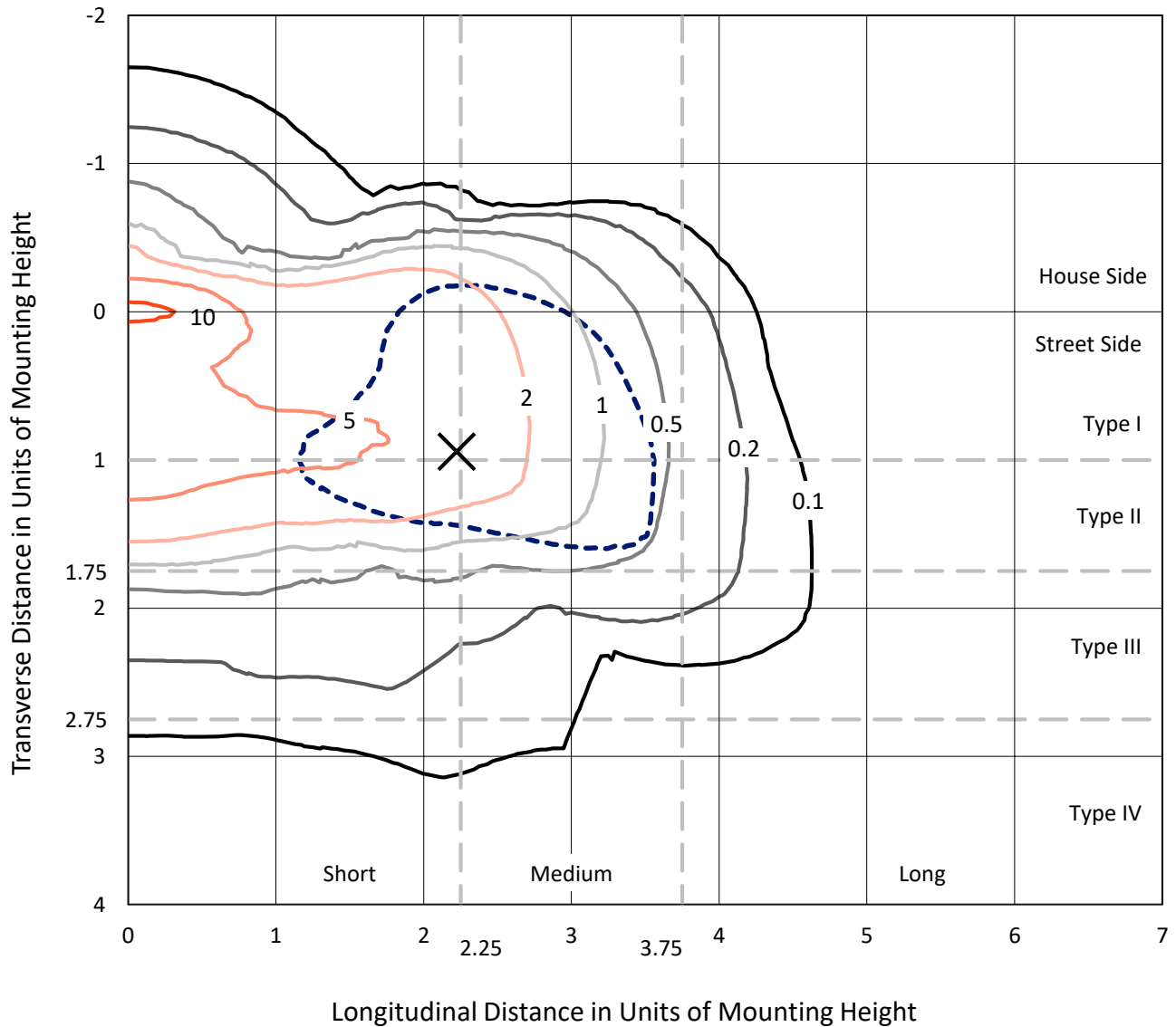
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

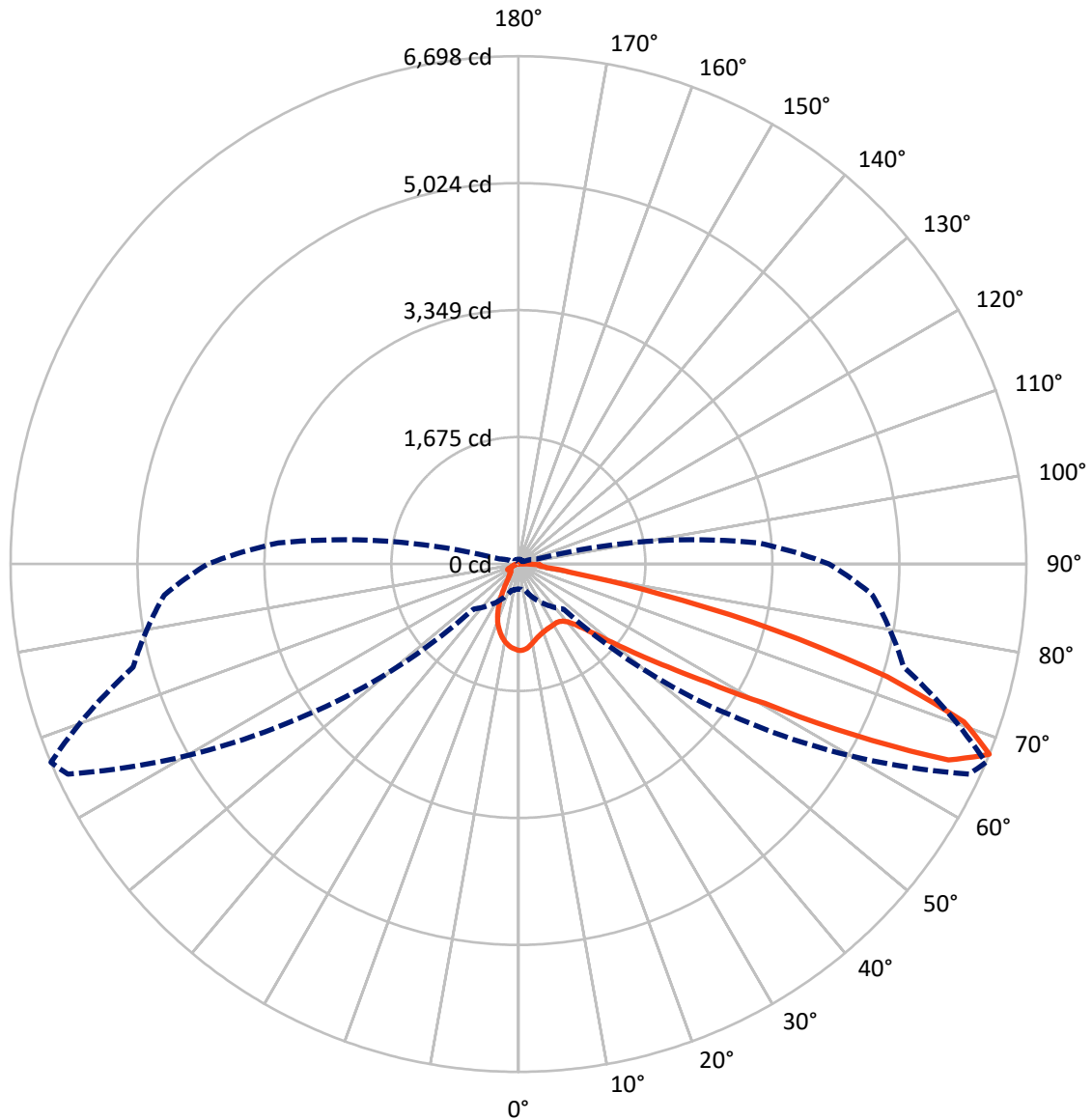
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	875.9	0.0	875.9
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	4410.4	0.0	4410.4
	% Fixture	83.4	0.0	83.4
Total	Lumens	5286.3	0.0	5286.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	1.8
10°-20°	225.1	4.3
20°-30°	305.1	5.8
30°-40°	433.7	8.2
40°-50°	725.7	13.7
50°-60°	1148.0	21.7
60°-70°	1462.5	27.7
70°-80°	766.0	14.5
80°-90°	122.9	2.3
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°	5286.3	100.0
0°-180°	5286.3	100.0

Coefficient of Utilization



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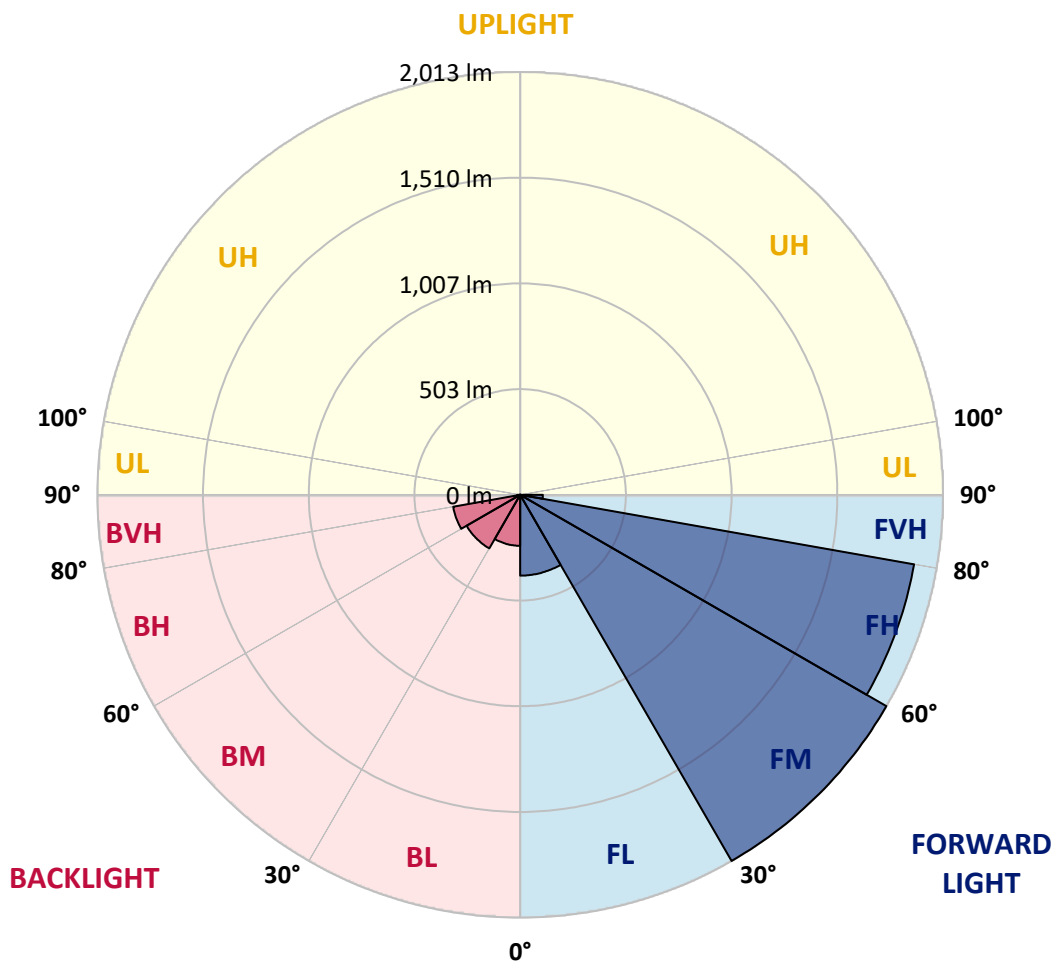
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.7	7.3			
FM	(30°-60°)	2013.1	38.1			
FH	(60°-80°)	1904.5	36.0			G2/5000
FVH	(80°-90°)	108.0	2.0			G2/225
BL	(0°-30°)	242.8	4.6	B1/500		
BM	(30°-60°)	294.3	5.6	B1/1000		
BH	(60°-80°)	324.0	6.1	B1/500		G1/500
BVH	(80°-90°)	14.8	0.3			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2
2.5°	1093.3	1095.1	1100.9	1104.5	1120.9	1128.0	1132.9	1137.9	1138.7	1141.0	1138.7
5°	978.6	982.5	993.2	1005.2	1037.0	1062.0	1088.4	1115.7	1120.7	1138.4	1143.4
7.5°	889.7	888.7	897.5	911.9	944.5	979.1	1025.3	1079.8	1090.4	1130.3	1149.6
10°	824.8	824.0	833.4	848.3	879.3	912.1	964.3	1038.8	1054.0	1117.6	1155.6
12.5°	776.8	777.1	786.5	802.9	834.5	867.6	920.5	999.2	1018.5	1102.7	1161.9
15°	745.0	747.1	754.7	772.2	802.9	836.0	887.9	969.5	991.1	1091.0	1168.9
17.5°	734.4	737.7	740.3	753.1	779.5	812.6	863.4	947.6	970.5	1082.9	1175.2
20°	744.3	748.2	743.2	747.6	764.3	793.5	844.1	930.4	953.8	1073.8	1176.0
22.5°	786.7	790.4	775.8	763.0	762.0	779.7	828.2	916.8	941.1	1067.0	1176.2
25°	861.6	863.9	839.4	809.7	780.8	774.8	817.0	907.4	933.3	1061.0	1171.3
27.5°	953.3	955.2	927.0	883.2	825.1	786.5	813.1	902.0	928.8	1055.8	1162.9
30°	1064.9	1073.5	1035.7	980.4	895.7	821.2	820.9	899.1	923.9	1046.9	1146.5
32.5°	1179.1	1182.7	1156.7	1100.6	990.9	882.2	842.8	901.2	922.6	1036.2	1125.6
35°	1294.8	1299.5	1282.6	1237.5	1120.9	971.6	885.5	913.4	930.6	1032.6	1111.0
37.5°	1444.7	1451.0	1427.5	1375.4	1279.2	1092.8	956.7	944.2	955.4	1043.0	1106.6
40°	1681.7	1678.8	1610.3	1532.6	1452.3	1247.9	1058.4	996.3	1002.9	1076.6	1120.2
42.5°	1957.5	1950.5	1832.4	1710.4	1642.6	1435.6	1192.9	1086.8	1085.5	1142.8	1167.9
45°	2177.5	2171.8	2065.4	1915.0	1860.8	1649.4	1366.8	1221.6	1211.9	1247.9	1256.0
47.5°	2296.6	2296.9	2235.6	2112.9	2111.6	1921.0	1590.2	1416.6	1399.9	1416.8	1408.2
50°	2254.9	2260.4	2253.9	2214.8	2340.4	2277.1	1881.9	1688.5	1654.8	1671.5	1638.4
52.5°	2053.2	2060.2	2098.8	2158.7	2436.6	2707.5	2310.5	2026.3	1987.2	1981.2	1944.5
55°	1695.5	1704.1	1782.8	1945.8	2356.6	2996.6	2986.7	2457.0	2394.7	2338.1	2322.4
57.5°	1168.7	1183.0	1309.7	1551.6	2097.7	3083.9	3791.9	3070.9	2944.2	2746.6	2750.2
60°	658.8	675.4	824.8	1044.6	1575.3	2989.0	4404.5	4000.7	3733.3	3224.9	3252.1
62.5°	418.9	436.9	550.3	725.7	945.2	2478.1	4655.6	5293.5	4953.8	3814.6	3841.2
65°	339.2	347.0	400.4	599.1	686.4	1492.9	4465.0	6358.4	6231.7	4563.0	4439.0
67.5°	331.1	333.7	361.3	502.9	658.2	839.1	3561.5	6557.6	6698.1	5261.9	4687.9
70°	327.2	336.3	407.2	479.9	630.3	707.8	2140.2	6011.7	6233.5	5444.7	4356.6
72.5°	158.8	158.2	204.9	434.0	710.1	734.1	1099.6	4864.1	5086.8	4717.1	3580.0
75°	128.0	117.0	111.8	159.0	682.7	758.1	700.7	3346.9	3508.0	3162.6	2200.7
77.5°	121.5	108.4	99.3	99.6	288.6	804.0	593.6	1852.4	1899.4	1428.6	603.0
80°	100.6	88.6	82.1	92.5	139.7	765.6	641.8	838.4	769.3	350.9	200.7
82.5°	69.9	63.6	61.8	77.7	111.8	545.6	746.3	450.5	377.7	175.7	123.8
85°	44.6	38.1	42.2	56.6	87.1	251.8	768.8	351.1	279.2	111.6	69.9
87.5°	20.6	16.7	20.9	31.3	56.8	86.8	731.5	394.4	287.5	58.9	44.1
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°	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2	1140.2
2.5°	1140.8	1135.8	1131.9	1124.6	1116.5	1108.7	1101.7	1092.8	1090.2	1087.8	1091.5
5°	1144.4	1139.5	1125.1	1102.7	1077.9	1054.7	1031.5	1011.7	999.5	992.7	996.6
7.5°	1149.9	1142.8	1113.1	1071.9	1027.4	986.7	944.7	911.1	886.3	874.6	878.0
10°	1154.8	1141.3	1092.8	1031.0	965.8	905.4	839.1	784.4	743.7	722.4	727.6
12.5°	1156.9	1135.3	1064.4	979.9	890.5	801.9	704.4	622.5	564.1	542.7	538.3
15°	1159.0	1128.5	1033.1	921.8	799.5	674.1	537.5	439.5	391.0	380.3	378.0
17.5°	1159.5	1116.8	997.6	858.7	692.9	522.2	367.6	305.3	305.5	322.7	324.8
20°	1154.1	1099.3	954.6	780.2	565.2	361.0	252.3	241.7	281.0	324.0	329.2
22.5°	1141.5	1076.1	905.9	688.7	418.9	237.7	195.3	207.0	257.8	310.5	316.5
25°	1125.6	1048.0	848.3	582.6	277.4	170.0	163.7	178.0	212.5	247.7	251.0
27.5°	1104.0	1014.6	783.6	461.2	180.1	140.0	144.2	153.8	167.9	183.5	185.1
30°	1076.1	974.7	714.5	336.3	136.1	125.9	131.9	137.1	143.1	152.0	152.8
32.5°	1044.0	936.4	643.6	232.3	120.7	118.6	123.3	125.9	130.6	136.1	136.6
35°	1017.2	899.9	570.1	164.2	114.2	113.1	116.3	117.3	121.7	127.7	128.3
37.5°	1001.8	870.2	494.3	132.4	109.7	108.2	110.0	110.0	116.3	125.1	126.4
40°	1002.9	853.7	418.4	119.7	106.1	104.0	104.3	104.3	112.4	122.0	122.8
42.5°	1031.3	857.9	351.1	114.7	103.2	100.9	99.6	100.4	107.1	113.4	113.9
45°	1098.0	887.4	288.1	111.6	100.4	99.6	96.7	96.5	99.1	101.9	101.9
47.5°	1207.5	945.5	245.3	109.5	98.0	97.8	94.4	91.0	90.7	91.8	91.8
50°	1385.5	1045.6	216.6	107.1	96.5	94.4	90.5	85.2	83.4	84.2	84.2
52.5°	1652.5	1224.2	205.7	104.0	93.1	89.7	85.2	80.0	78.5	78.7	78.7
55°	2002.6	1498.4	204.1	100.4	89.4	83.9	80.3	76.4	74.6	75.1	75.1
57.5°	2430.4	1877.7	232.0	94.6	84.5	78.2	76.1	73.5	72.2	73.0	72.7
60°	2950.4	2374.1	344.1	88.6	79.5	73.0	73.0	70.9	69.9	70.6	70.4
62.5°	3549.5	2944.2	483.8	84.2	74.3	68.8	69.9	68.8	67.8	68.3	68.0
65°	4080.8	3315.7	453.1	80.8	69.1	64.9	66.7	66.2	65.4	66.0	65.7
67.5°	4096.2	3178.0	254.4	77.2	64.1	61.0	63.6	63.3	62.8	63.3	63.1
70°	3655.6	2683.5	143.4	70.4	58.9	56.3	60.0	59.7	59.2	60.2	60.0
72.5°	2928.8	1947.3	104.8	62.0	53.7	51.4	55.5	55.3	55.3	56.8	56.0
75°	1685.3	1002.1	83.7	53.2	48.2	46.4	50.1	50.3	50.8	52.9	51.4
77.5°	480.4	312.3	68.3	45.1	41.4	40.7	44.3	44.8	45.1	47.4	45.4
80°	178.6	143.9	56.3	37.8	33.9	34.1	37.5	38.3	38.6	40.9	38.3
82.5°	113.9	94.9	45.6	29.2	26.6	26.3	30.5	31.5	31.5	31.8	30.2
85°	66.5	56.8	34.4	21.1	18.8	18.0	22.7	24.5	23.7	23.2	22.2
87.5°	44.6	39.1	21.1	11.7	10.2	9.6	13.3	14.6	14.1	13.3	12.5
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)