

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: P299159

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299159
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-SL2-7050-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4915.4 lumens
Efficiency: N/A
Efficacy: 111.7 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

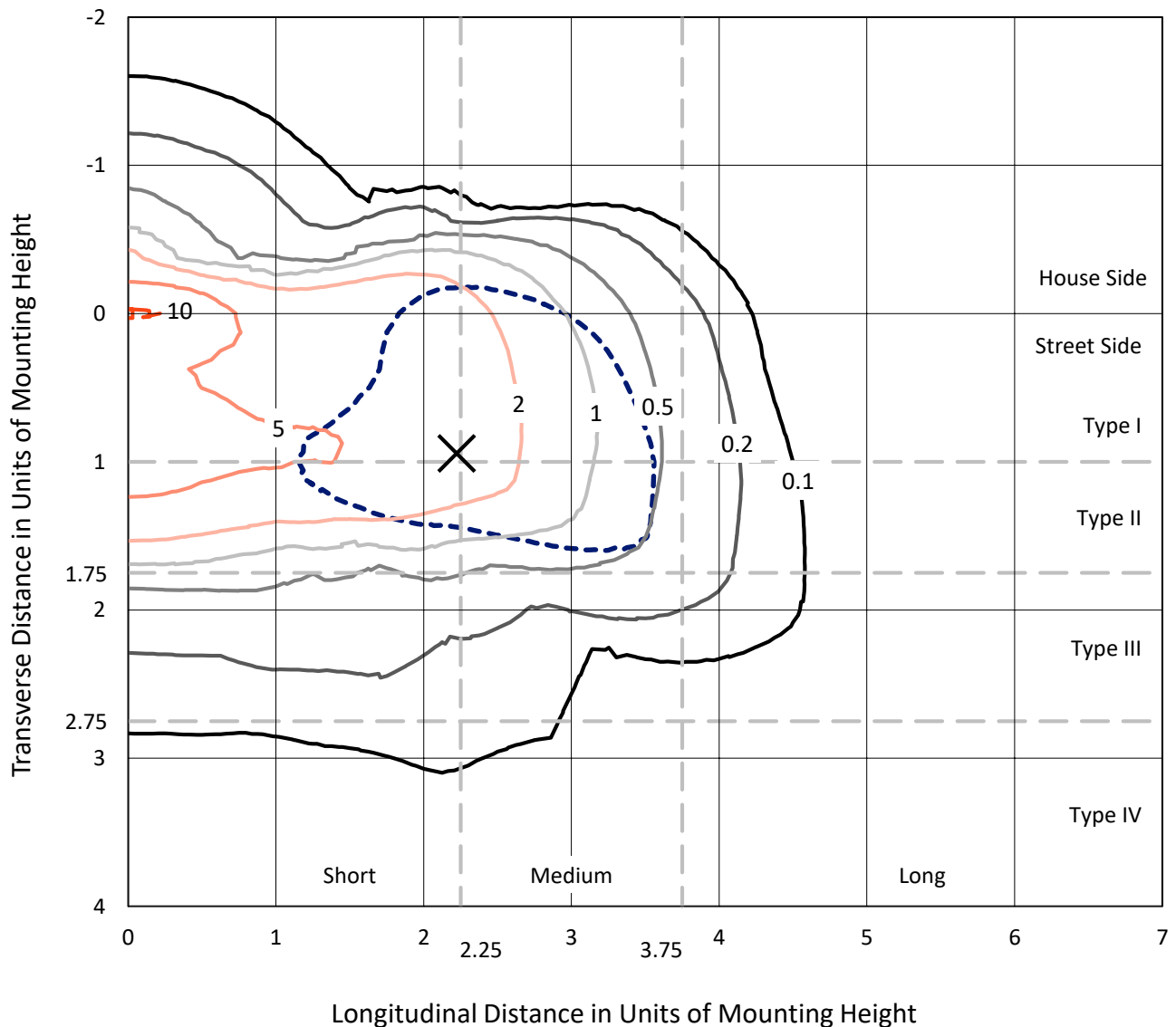
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

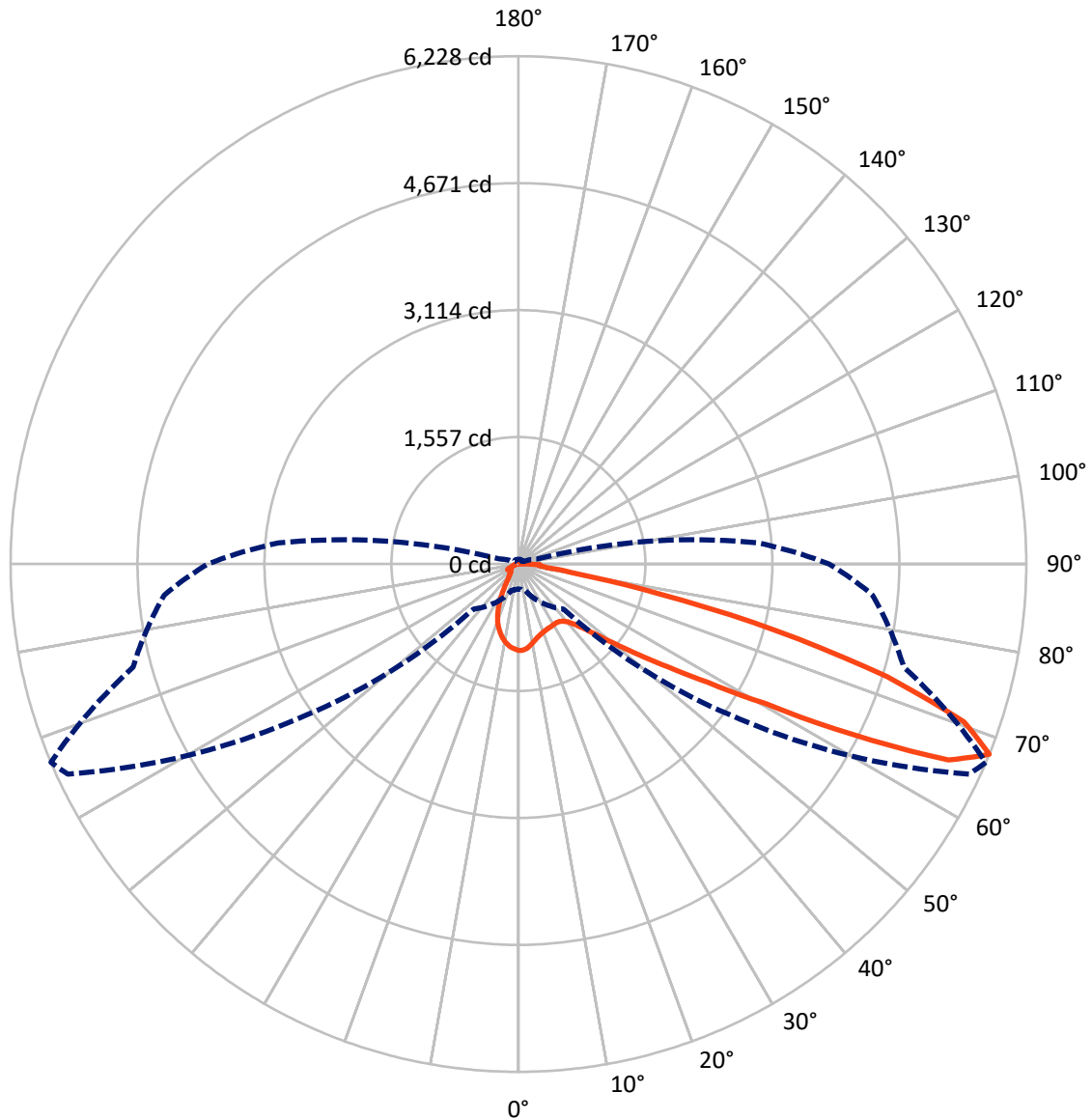
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.6 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	814.4	0.0	814.4
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	4101.0	0.0	4101.0
	% Fixture	83.4	0.0	83.4
Total	Lumens	4915.4	0.0	4915.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	1.8
10°-20°	209.3	4.3
20°-30°	283.7	5.8
30°-40°	403.3	8.2
40°-50°	674.8	13.7
50°-60°	1067.5	21.7
60°-70°	1359.9	27.7
70°-80°	712.3	14.5
80°-90°	114.2	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°	4915.4	100.0
0°-180°	4915.4	100.0



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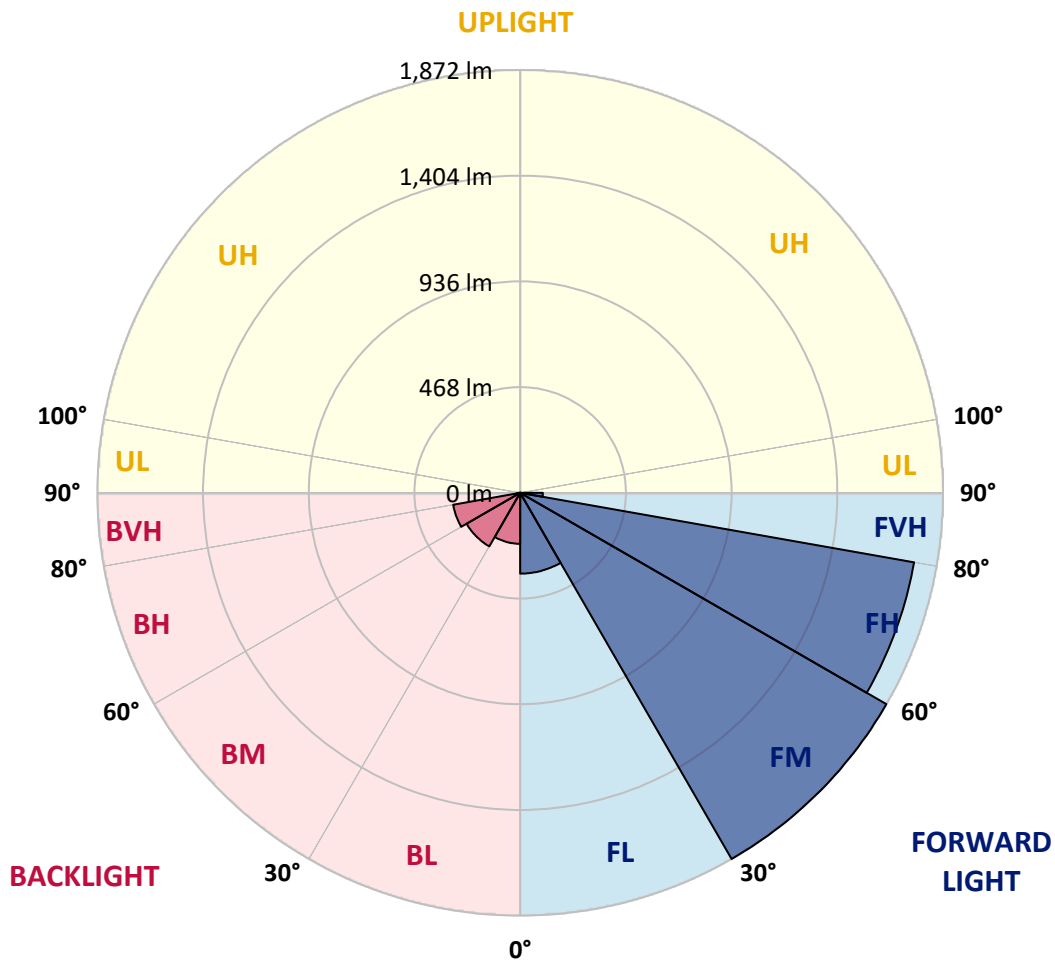
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	357.7	7.3			
FM (30°-60°)	1871.9	38.1			
FH (60°-80°)	1770.9	36.0			G1/1800
FVH (80°-90°)	100.4	2.0			G2/225
BL (0°-30°)	225.7	4.6	B1/500		
BM (30°-60°)	273.7	5.6	B1/1000		
BH (60°-80°)	301.2	6.1	B1/500		G1/500
BVH (80°-90°)	13.8	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°	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2
2.5°	1016.6	1018.3	1023.6	1027.0	1042.3	1048.8	1053.5	1058.1	1058.8	1061.0	1058.8
5°	910.0	913.6	923.5	934.7	964.3	987.5	1012.0	1037.5	1042.1	1058.5	1063.1
7.5°	827.3	826.3	834.6	847.9	878.2	910.4	953.3	1004.0	1013.9	1051.0	1069.0
10°	766.9	766.2	774.9	788.8	817.6	848.1	896.6	965.9	980.0	1039.2	1074.5
12.5°	722.3	722.6	731.3	746.6	775.9	806.7	855.9	929.1	947.0	1025.3	1080.4
15°	692.8	694.7	701.7	718.0	746.6	777.4	825.6	901.5	921.6	1014.4	1086.9
17.5°	682.8	686.0	688.4	700.3	724.8	755.5	802.8	881.1	902.4	1006.9	1092.7
20°	692.0	695.7	691.1	695.2	710.7	737.9	784.9	865.1	886.9	998.4	1093.4
22.5°	731.6	734.9	721.4	709.5	708.5	725.0	770.1	852.5	875.0	992.1	1093.7
25°	801.1	803.3	780.5	752.9	726.0	720.4	759.7	843.8	867.8	986.6	1089.1
27.5°	886.4	888.1	862.0	821.2	767.2	731.3	756.0	838.7	863.7	981.7	1081.3
30°	990.2	998.2	963.0	911.7	832.9	763.5	763.3	836.0	859.1	973.5	1066.1
32.5°	1096.4	1099.8	1075.5	1023.4	921.3	820.3	783.7	838.0	857.8	963.5	1046.7
35°	1204.0	1208.3	1192.6	1150.7	1042.3	903.4	823.4	849.4	865.4	960.1	1033.1
37.5°	1343.4	1349.2	1327.4	1278.9	1189.4	1016.1	889.6	878.0	888.4	969.8	1029.0
40°	1563.7	1561.0	1497.3	1425.0	1350.4	1160.4	984.1	926.4	932.5	1001.1	1041.6
42.5°	1820.2	1813.6	1703.8	1590.4	1527.3	1334.9	1109.2	1010.5	1009.3	1062.7	1085.9
45°	2024.7	2019.4	1920.5	1780.6	1730.2	1533.6	1270.9	1135.9	1126.9	1160.4	1167.9
47.5°	2135.5	2135.8	2078.8	1964.6	1963.4	1786.2	1478.6	1317.2	1301.7	1317.4	1309.4
50°	2096.7	2101.8	2095.8	2059.4	2176.2	2117.3	1749.9	1570.0	1538.7	1554.2	1523.5
52.5°	1909.1	1915.7	1951.5	2007.3	2265.7	2517.5	2148.4	1884.1	1847.8	1842.2	1808.0
55°	1576.5	1584.5	1657.7	1809.2	2191.3	2786.3	2777.1	2284.6	2226.7	2174.1	2159.5
57.5°	1086.7	1100.0	1217.8	1442.7	1950.6	2867.5	3525.9	2855.4	2737.6	2553.9	2557.3
60°	612.5	628.0	766.9	971.3	1464.8	2779.3	4095.5	3720.1	3471.4	2998.7	3023.9
62.5°	389.5	406.3	511.7	674.8	878.9	2304.2	4329.0	4922.1	4606.3	3547.0	3571.7
65°	315.4	322.6	372.3	557.0	638.2	1388.2	4151.8	5912.3	5794.5	4242.9	4127.5
67.5°	307.8	310.3	336.0	467.6	612.1	780.3	3311.6	6097.5	6228.1	4892.8	4359.0
70°	304.2	312.7	378.6	446.3	586.1	658.1	1990.1	5589.9	5796.2	5062.7	4050.9
72.5°	147.6	147.1	190.5	403.6	660.3	682.6	1022.4	4522.9	4729.9	4386.2	3328.8
75°	119.0	108.8	104.0	147.9	634.8	704.9	651.6	3112.1	3261.9	2940.7	2046.3
77.5°	113.0	100.8	92.4	92.6	268.3	747.5	551.9	1722.5	1766.1	1328.3	560.7
80°	93.6	82.4	76.4	86.1	129.9	711.9	596.8	779.5	715.3	326.3	186.6
82.5°	65.0	59.1	57.4	72.2	104.0	507.3	694.0	418.9	351.2	163.4	115.1
85°	41.4	35.4	39.3	52.6	81.0	234.2	714.8	326.5	259.6	103.7	65.0
87.5°	19.1	15.5	19.4	29.1	52.8	80.7	680.2	366.7	267.4	54.8	41.0
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°	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2
2.5°	1060.7	1056.1	1052.5	1045.7	1038.2	1030.9	1024.4	1016.1	1013.7	1011.5	1014.9
5°	1064.1	1059.5	1046.2	1025.3	1002.3	980.7	959.2	940.7	929.3	923.0	926.7
7.5°	1069.2	1062.7	1035.0	996.7	955.3	917.5	878.4	847.2	824.1	813.2	816.4
10°	1073.8	1061.2	1016.1	958.7	898.1	841.8	780.3	729.4	691.6	671.7	676.5
12.5°	1075.8	1055.6	989.7	911.2	828.0	745.6	655.0	578.8	524.5	504.7	500.5
15°	1077.7	1049.3	960.6	857.1	743.4	626.8	499.8	408.7	363.6	353.7	351.5
17.5°	1078.2	1038.4	927.6	798.5	644.3	485.5	341.8	283.8	284.1	300.1	302.0
20°	1073.1	1022.2	887.7	725.5	525.5	335.7	234.6	224.7	261.3	301.3	306.1
22.5°	1061.5	1000.6	842.3	640.4	389.5	221.1	181.6	192.5	239.7	288.7	294.3
25°	1046.7	974.4	788.8	541.8	257.9	158.0	152.2	165.6	197.6	230.3	233.4
27.5°	1026.5	943.4	728.6	428.8	167.5	130.2	134.0	143.0	156.1	170.6	172.1
30°	1000.6	906.3	664.4	312.7	126.5	117.1	122.7	127.5	133.1	141.3	142.0
32.5°	970.8	870.7	598.5	216.0	112.2	110.3	114.7	117.1	121.4	126.5	127.0
35°	945.8	836.8	530.1	152.7	106.2	105.2	108.1	109.1	113.2	118.8	119.3
37.5°	931.5	809.1	459.6	123.1	102.0	100.6	102.3	102.3	108.1	116.4	117.6
40°	932.5	793.8	389.0	111.3	98.7	96.7	97.0	97.0	104.5	113.4	114.2
42.5°	958.9	797.7	326.5	106.7	96.0	93.8	92.6	93.3	99.6	105.4	105.9
45°	1021.0	825.1	267.8	103.7	93.3	92.6	89.9	89.7	92.1	94.8	94.8
47.5°	1122.8	879.2	228.1	101.8	91.1	90.9	87.7	84.6	84.4	85.3	85.3
50°	1288.3	972.3	201.4	99.6	89.7	87.7	84.1	79.3	77.6	78.3	78.3
52.5°	1536.5	1138.3	191.3	96.7	86.5	83.4	79.3	74.4	73.0	73.2	73.2
55°	1862.1	1393.3	189.8	93.3	83.1	78.1	74.7	71.0	69.3	69.8	69.8
57.5°	2259.9	1746.0	215.7	88.0	78.5	72.7	70.8	68.4	67.1	67.9	67.6
60°	2743.4	2207.5	320.0	82.4	73.9	67.9	67.9	65.9	65.0	65.7	65.4
62.5°	3300.5	2737.6	449.9	78.3	69.1	64.0	65.0	64.0	63.0	63.5	63.3
65°	3794.5	3083.0	421.3	75.1	64.2	60.4	62.1	61.6	60.8	61.3	61.1
67.5°	3808.8	2955.1	236.6	71.7	59.6	56.7	59.1	58.9	58.4	58.9	58.7
70°	3399.1	2495.2	133.3	65.4	54.8	52.4	55.8	55.5	55.0	56.0	55.8
72.5°	2723.3	1810.7	97.4	57.7	49.9	47.8	51.6	51.4	51.4	52.8	52.1
75°	1567.1	931.8	77.8	49.4	44.8	43.1	46.5	46.8	47.3	49.2	47.8
77.5°	446.7	290.4	63.5	41.9	38.5	37.8	41.2	41.7	41.9	44.1	42.2
80°	166.0	133.8	52.4	35.1	31.5	31.8	34.9	35.6	35.9	38.1	35.6
82.5°	105.9	88.2	42.4	27.1	24.7	24.5	28.4	29.3	29.3	29.6	28.1
85°	61.8	52.8	32.0	19.6	17.5	16.7	21.1	22.8	22.1	21.6	20.6
87.5°	41.4	36.4	19.6	10.9	9.5	9.0	12.4	13.6	13.1	12.4	11.6
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)