

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: P299995

Luminaire Tested: **GLNA-AF-01-LED-E1-SL3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
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-SL3-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4202.2 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

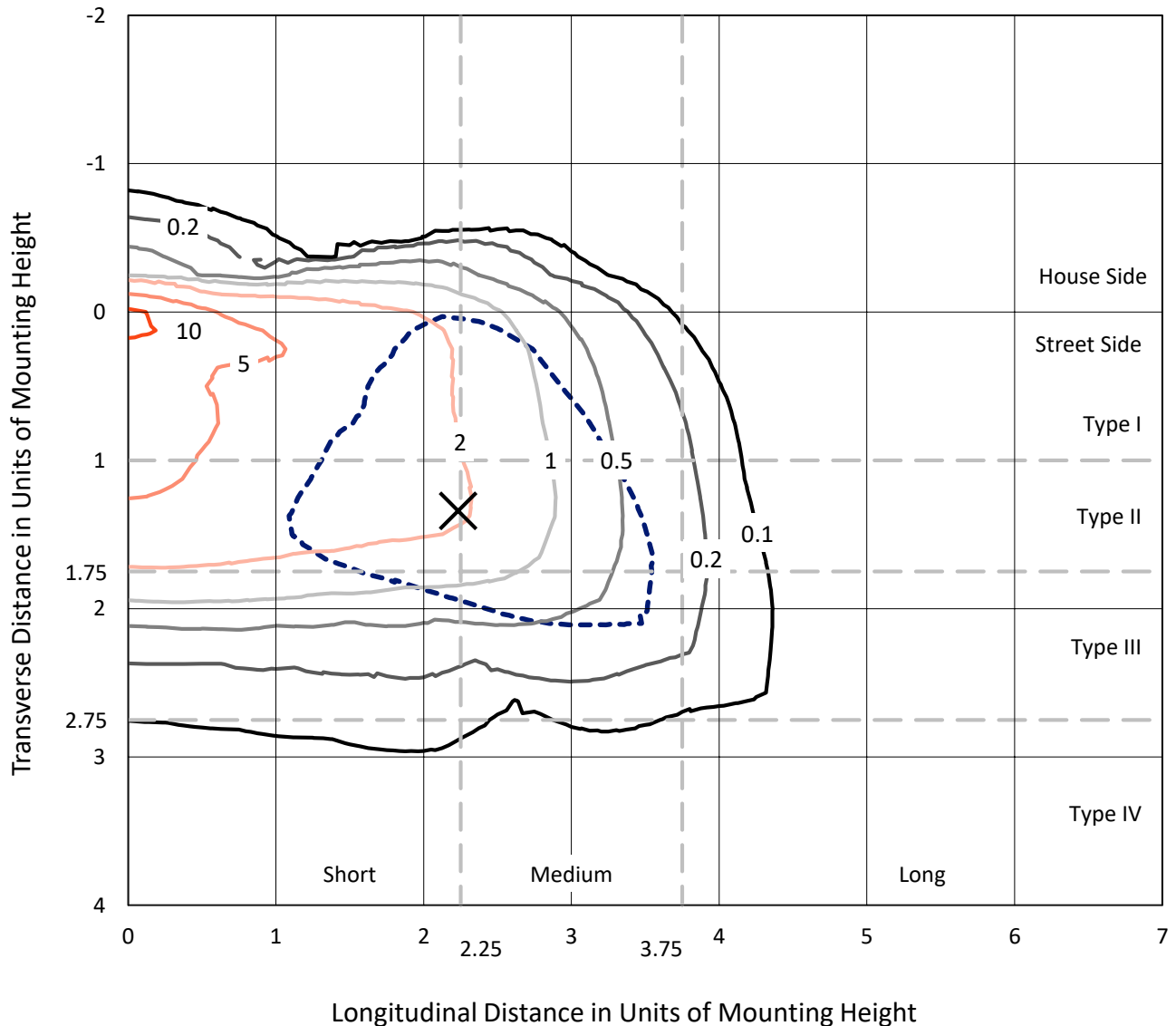
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

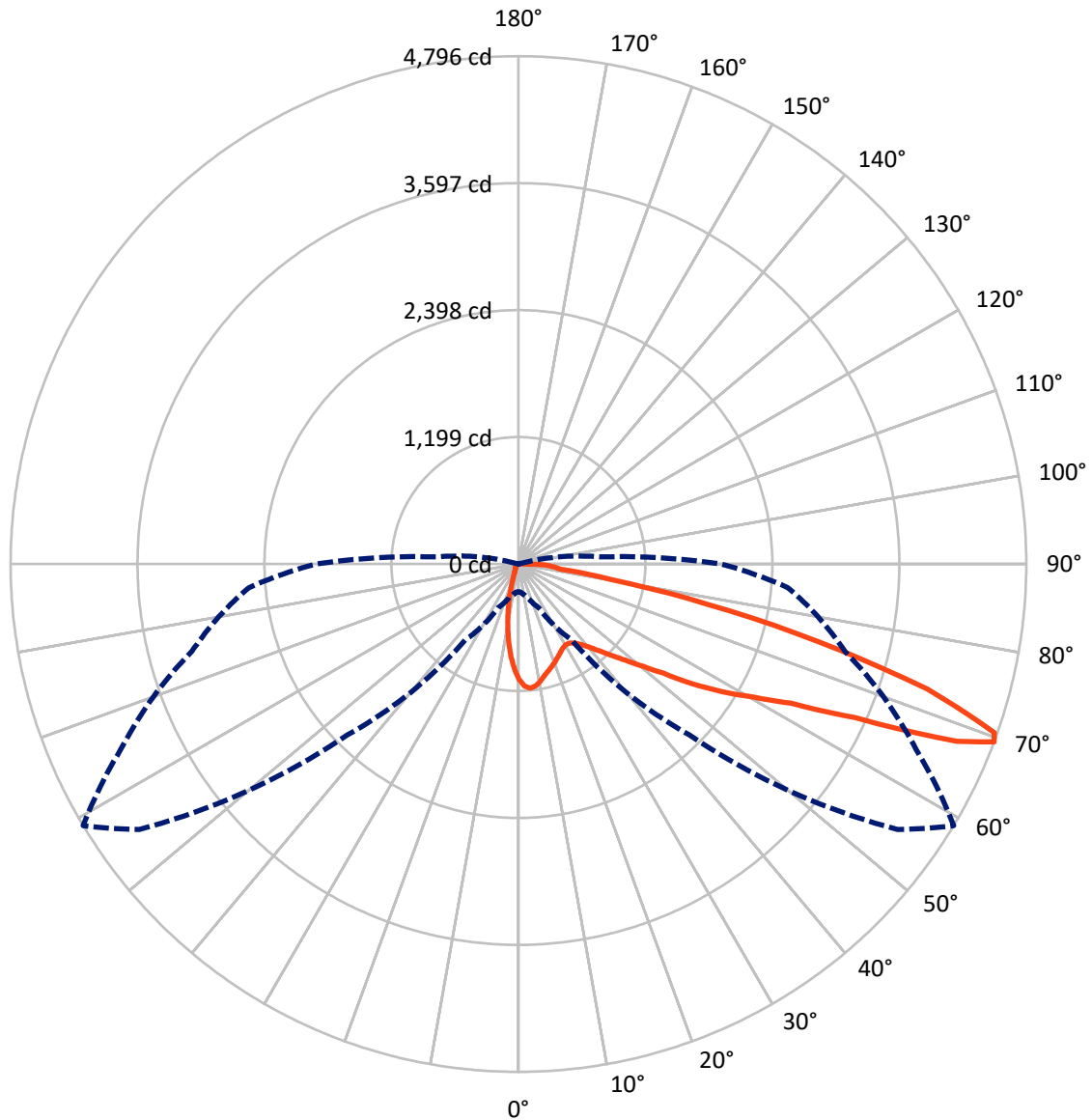
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	342.2	0.0	342.2
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	3860.0	0.0	3860.0
	% Fixture	91.9	0.0	91.9
Total	Lumens	4202.2	0.0	4202.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	2.1
10°-20°	183.4	4.4
20°-30°	246.9	5.9
30°-40°	358.4	8.5
40°-50°	596.8	14.2
50°-60°	931.0	22.2
60°-70°	1152.0	27.4
70°-80°	583.8	13.9
80°-90°	61.1	1.5
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°	4202.2	100.0
0°-180°	4202.2	100.0



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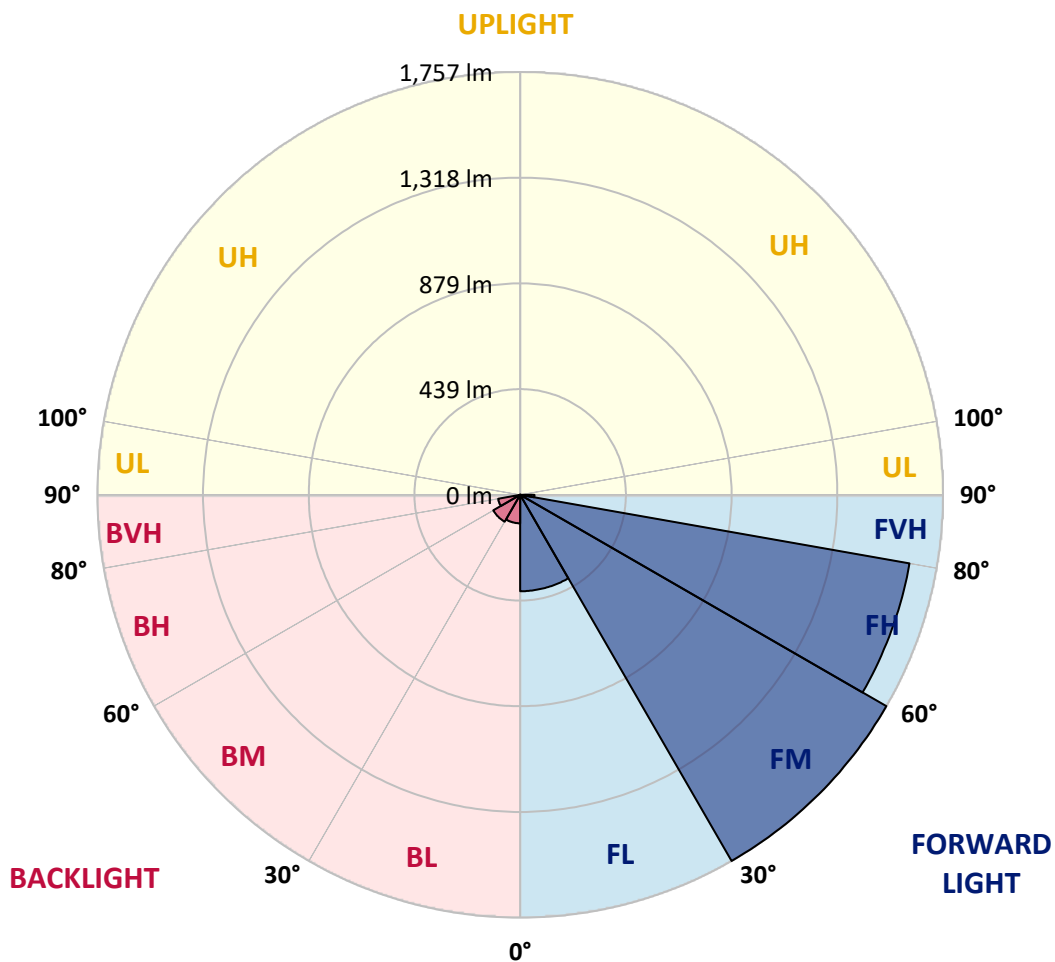
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	400.6	9.5			
FM	(30°-60°)	1757.2	41.8			
FH	(60°-80°)	1642.9	39.1			G1/1800
FVH	(80°-90°)	59.2	1.4			G1/100
BL	(0°-30°)	118.4	2.8	B1/500		
BM	(30°-60°)	128.9	3.1	B0/220		
BH	(60°-80°)	92.9	2.2	B0/110		G0/110
BVH	(80°-90°)	1.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7
2.5°	1198.8	1198.4	1193.1	1190.7	1186.4	1177.4	1163.4	1156.0	1144.2	1123.5	1095.7
5°	1187.8	1193.6	1196.6	1196.9	1200.0	1196.6	1184.0	1177.9	1161.5	1128.2	1078.4
7.5°	1113.7	1115.8	1124.7	1132.2	1147.0	1161.0	1165.5	1162.9	1153.2	1117.6	1051.2
10°	1034.4	1036.5	1047.0	1056.9	1076.9	1098.5	1121.3	1126.1	1130.2	1102.3	1025.1
12.5°	965.9	968.1	978.8	991.8	1015.1	1041.7	1077.1	1085.0	1102.8	1087.8	1004.2
15°	907.0	907.9	918.4	934.5	962.4	996.6	1036.8	1049.4	1076.7	1077.6	985.9
17.5°	856.8	859.2	865.7	881.1	911.5	953.8	1000.7	1018.7	1050.7	1069.1	968.1
20°	826.2	828.6	828.3	836.9	864.2	909.4	964.5	986.1	1025.1	1060.3	952.2
22.5°	820.3	820.3	814.1	812.9	829.1	866.8	927.0	953.3	1002.0	1056.5	941.0
25°	841.4	840.4	825.0	812.5	813.2	835.7	890.6	921.9	982.6	1059.1	935.0
27.5°	886.1	884.9	865.4	841.4	822.2	821.9	863.0	896.8	967.1	1071.4	937.4
30°	947.8	947.4	926.3	896.0	861.2	829.1	853.5	884.2	957.1	1093.7	942.9
32.5°	1015.3	1014.6	998.7	966.9	922.7	861.2	863.5	889.2	960.0	1123.5	956.2
35°	1086.9	1085.7	1078.8	1051.0	1002.3	920.3	896.3	916.3	978.1	1167.9	982.3
37.5°	1164.3	1165.5	1170.5	1143.9	1092.8	1003.2	951.2	964.8	1014.4	1228.3	1024.8
40°	1278.6	1278.4	1280.1	1245.1	1196.0	1104.7	1027.9	1032.2	1075.3	1308.4	1089.5
42.5°	1486.1	1471.6	1427.6	1356.3	1306.9	1220.7	1124.7	1120.2	1149.6	1407.4	1180.0
45°	1764.8	1733.9	1619.9	1483.2	1420.0	1351.4	1243.7	1229.2	1248.0	1526.5	1291.7
47.5°	2004.5	1972.5	1811.2	1615.3	1540.0	1475.4	1383.2	1357.1	1363.2	1659.8	1433.3
50°	2086.1	2070.4	1929.5	1730.4	1656.2	1631.5	1545.0	1513.2	1504.4	1814.0	1597.5
52.5°	2057.8	2056.6	1962.7	1805.0	1762.7	1793.1	1748.6	1711.8	1679.5	1976.6	1764.5
55°	2012.4	2018.4	1976.3	1870.3	1868.9	1940.7	2027.1	1996.5	1902.9	2153.1	1908.6
57.5°	1887.2	1912.6	1968.7	1993.9	2052.3	2125.8	2259.1	2277.1	2166.4	2288.3	2028.1
60°	1531.2	1587.1	1770.5	2011.7	2288.8	2471.7	2539.0	2554.4	2382.6	2400.7	2189.4
62.5°	1086.9	1143.9	1376.6	1784.5	2292.3	2926.3	2956.0	2895.4	2620.7	2567.3	2467.7
65°	576.9	620.9	811.0	1288.1	1987.5	3031.8	3685.3	3504.7	3040.8	2894.9	2827.2
67.5°	295.1	308.4	384.0	630.4	1366.3	2693.0	4338.9	4466.1	3764.8	3220.0	2809.9
69°	261.2	269.0	319.1	455.8	874.9	2280.9	4370.8	4796.1	4143.9	3192.9	2553.5
70°	252.8	259.7	305.3	412.5	683.9	1912.8	4248.9	4767.1	4240.8	3089.8	2362.0
72.5°	214.6	220.5	271.9	364.5	555.8	949.5	3451.5	4039.6	3805.5	2573.9	1709.6
75°	143.5	163.0	260.9	341.7	517.1	539.4	2275.5	2919.2	2711.7	1736.1	890.6
77.5°	34.5	37.1	73.7	271.9	472.9	474.8	1170.3	1814.7	1480.2	618.8	210.5
80°	18.6	17.8	20.6	54.0	440.3	445.5	526.8	880.9	528.5	102.7	69.4
82.5°	13.1	12.4	13.3	22.6	138.6	405.8	381.2	398.7	219.1	39.4	31.2
85°	4.7	4.5	7.3	20.4	43.5	233.3	391.6	328.9	177.5	18.1	22.8
87.5°	1.7	1.4	2.9	11.2	13.3	99.4	241.7	248.6	69.9	10.9	10.7
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°	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7	1093.7
2.5°	1084.0	1069.3	1042.2	1014.4	988.7	957.8	942.4	927.2	920.8	918.4	907.3
5°	1052.7	1027.7	970.2	912.5	859.2	802.7	765.4	735.5	717.8	709.3	695.8
7.5°	1012.5	971.7	884.4	795.3	712.4	630.7	570.1	523.5	491.4	476.0	461.9
10°	973.5	919.1	795.1	673.7	561.0	452.7	369.0	308.4	269.7	251.9	240.5
12.5°	938.6	868.1	708.9	555.1	413.7	286.8	201.7	153.5	129.5	121.2	117.1
15°	907.5	821.0	627.3	442.4	280.1	164.0	110.3	93.9	90.1	90.1	89.6
17.5°	878.0	774.9	548.6	336.7	175.8	100.3	83.9	81.7	81.7	82.7	82.7
20°	849.7	730.9	472.6	241.7	110.7	79.6	75.8	75.3	75.8	77.0	77.0
22.5°	825.5	691.0	401.6	165.8	82.2	71.7	69.9	69.1	69.4	70.1	70.6
25°	807.4	657.3	334.6	112.4	70.8	65.3	63.2	62.0	61.1	61.1	61.5
27.5°	796.0	628.8	269.7	81.7	63.7	59.4	56.0	54.2	52.0	50.9	51.3
30°	787.7	601.7	208.9	66.8	57.1	52.7	48.5	45.4	42.3	40.9	41.4
32.5°	784.6	579.8	156.1	58.9	51.1	46.3	41.1	37.1	33.7	32.5	32.8
35°	793.0	562.4	114.3	53.2	46.3	40.4	34.5	29.9	27.3	26.6	26.8
37.5°	814.8	553.2	85.5	48.5	42.1	35.4	28.8	24.5	22.8	22.8	23.0
40°	856.1	553.0	68.7	45.2	38.3	30.6	23.7	20.6	19.7	20.2	20.4
42.5°	916.5	565.5	59.9	42.1	35.0	26.1	19.7	17.6	17.3	17.8	18.1
45°	998.9	588.6	55.1	39.4	31.4	21.9	16.6	15.2	15.2	15.9	16.2
47.5°	1099.9	622.3	51.1	36.8	27.8	18.3	14.2	13.3	13.5	14.2	14.5
50°	1221.6	664.9	47.1	34.0	25.2	15.2	12.4	11.7	11.9	12.8	13.1
52.5°	1360.2	722.2	43.7	31.4	21.9	12.6	10.4	10.0	10.4	11.4	11.7
55°	1478.9	773.5	39.7	29.2	17.6	10.4	8.6	8.6	9.1	10.2	10.4
57.5°	1593.2	827.1	36.1	25.2	13.8	8.3	7.1	7.3	8.1	9.3	9.5
60°	1761.0	918.1	31.9	21.2	10.4	6.6	6.0	6.2	7.1	8.3	8.6
62.5°	2045.9	1056.7	27.6	17.6	8.1	5.3	4.7	5.3	6.4	7.8	8.1
65°	2303.0	1113.0	22.6	14.7	6.2	4.0	4.0	4.7	6.2	7.6	7.8
67.5°	2159.7	936.9	17.6	11.7	4.7	3.1	3.3	4.5	6.0	7.6	7.8
69°	1910.0	766.1	15.0	9.3	4.0	2.9	3.1	4.5	6.0	7.3	7.6
70°	1715.4	646.8	13.3	7.8	3.6	2.9	3.1	4.2	6.0	7.3	7.6
72.5°	1148.9	349.3	10.7	5.7	3.3	2.6	2.6	4.2	5.7	7.1	7.3
75°	493.7	96.5	8.6	4.0	2.9	2.4	2.4	4.0	5.5	6.9	7.3
77.5°	90.3	24.5	6.9	3.6	2.9	2.4	2.2	3.8	5.3	6.6	6.9
80°	35.9	12.1	5.5	3.1	2.6	2.2	1.9	3.6	5.0	6.4	6.6
82.5°	21.7	6.9	4.5	2.9	2.6	1.9	1.7	3.1	4.7	6.2	6.4
85°	17.6	4.7	3.6	2.9	2.4	1.9	1.4	2.9	4.2	6.0	6.2
87.5°	8.6	3.3	3.3	2.6	2.4	1.9	1.4	2.6	4.0	5.7	6.0
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)