

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: P299581

Luminaire Tested: **GLNA-AF-02-LED-E1-SL2-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
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-SL2-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7961 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

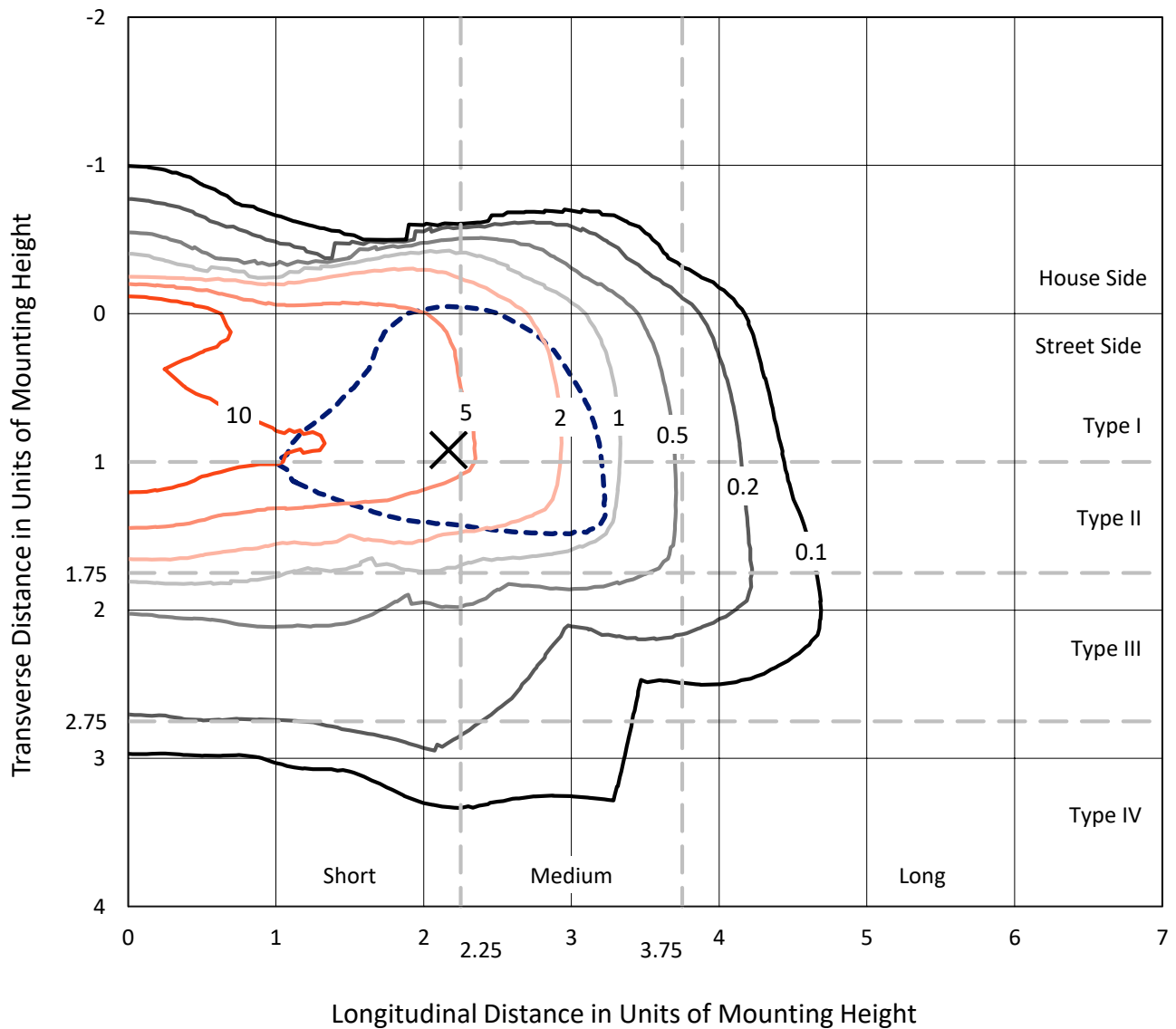
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

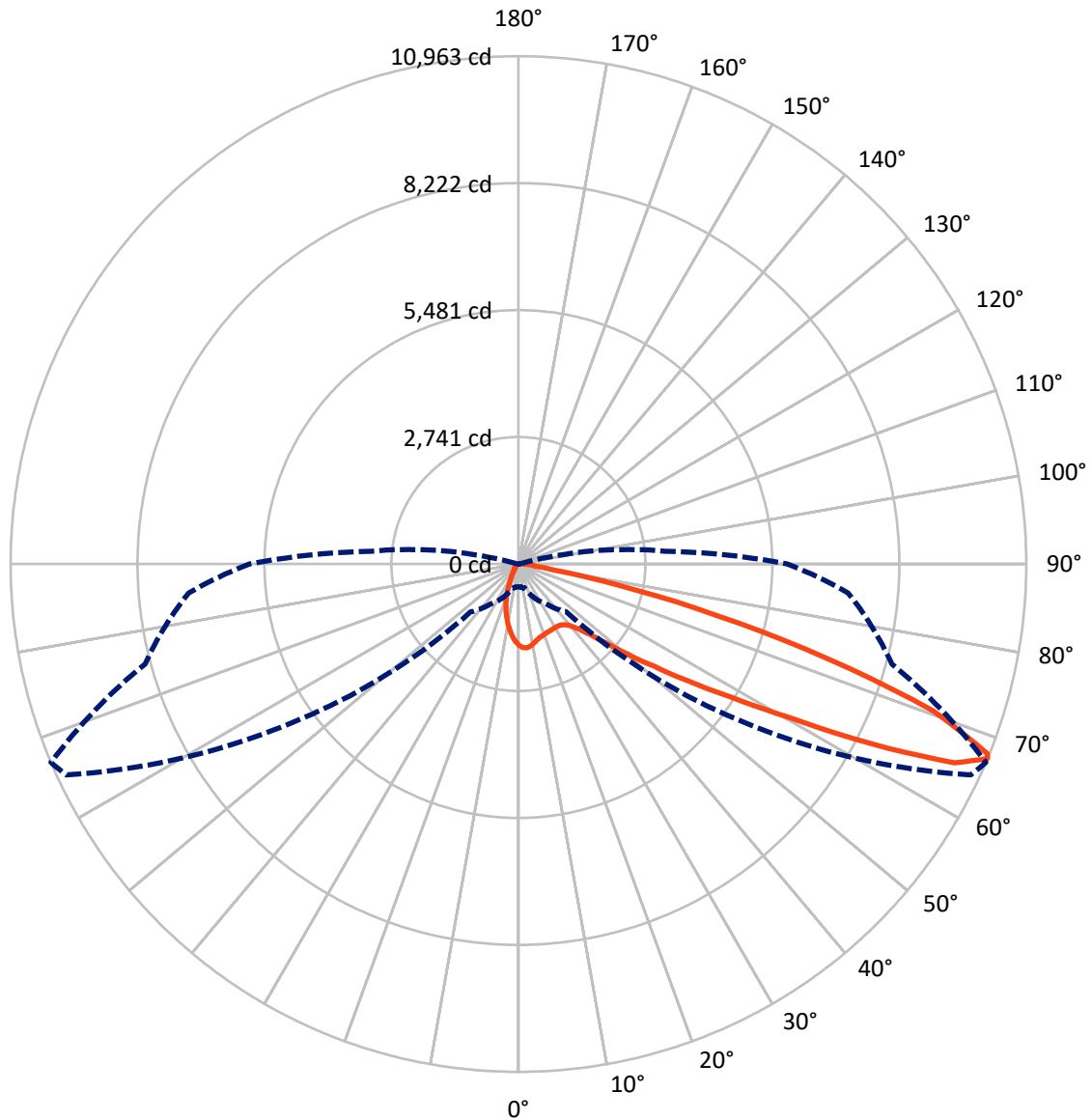


Based on 10 foot mounting height. Maximum calculated value = 17.6 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	826.6	0.0	826.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	7134.4	0.0	7134.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	7961.0	0.0	7961.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.9	1.8
10°-20°	304.1	3.8
20°-30°	442.1	5.6
30°-40°	689.7	8.7
40°-50°	1221.7	15.3
50°-60°	1933.2	24.3
60°-70°	2214.2	27.8
70°-80°	918.4	11.5
80°-90°	94.9	1.2
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°	7961.0	100.0
0°-180°	7961.0	100.0

Coefficient of Utilization



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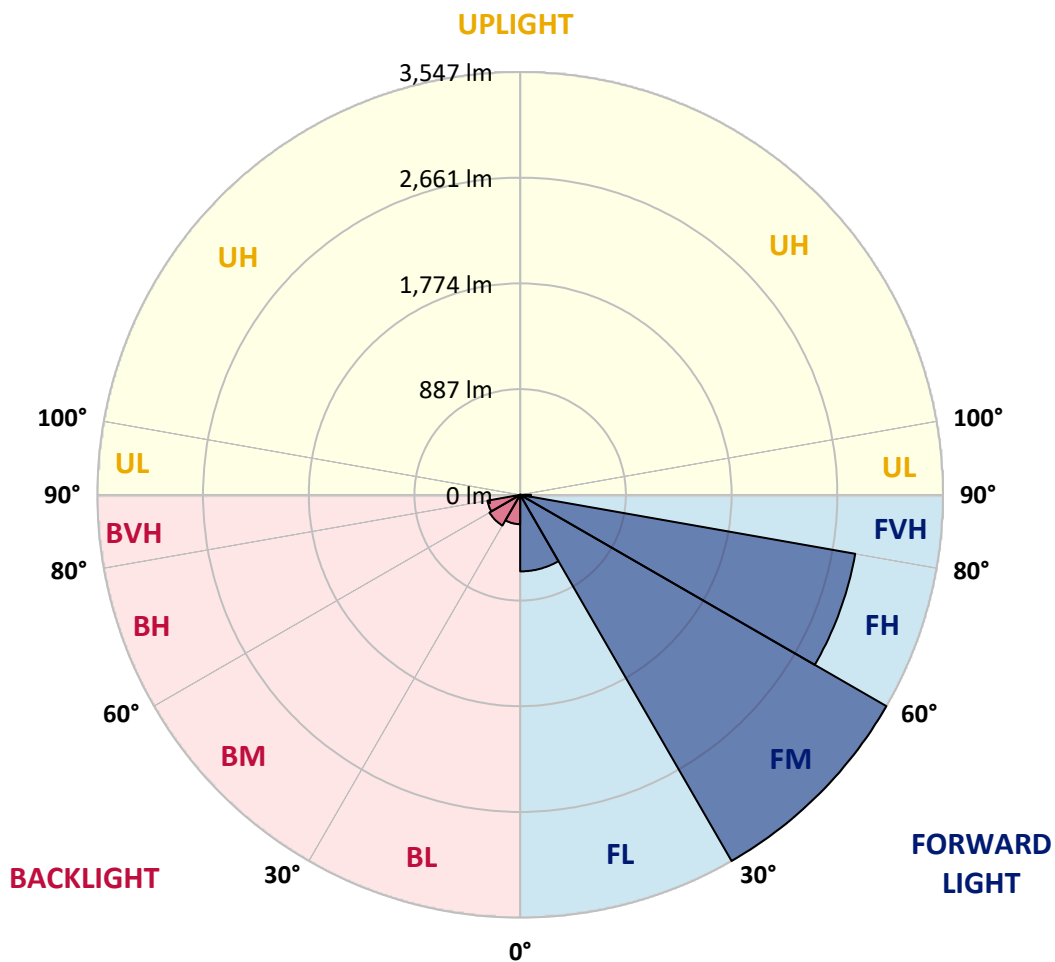
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	642.3	8.1			
FM (30°-60°)	3547.4	44.6			
FH (60°-80°)	2854.0	35.9			G2/5000
FVH (80°-90°)	90.6	1.1			G1/100
BL (0°-30°)	246.7	3.1	B1/500		
BM (30°-60°)	297.1	3.7	B1/1000		
BH (60°-80°)	278.6	3.5	B1/500		G1/500
BVH (80°-90°)	4.3	0.1			G0/10
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°	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7
2.5°	1815.1	1818.8	1818.4	1821.2	1827.7	1828.1	1821.6	1809.1	1806.3	1790.1	1761.7
5°	1674.0	1684.6	1691.2	1717.6	1747.3	1783.1	1810.0	1819.8	1818.4	1806.8	1764.1
7.5°	1512.8	1523.5	1531.0	1562.1	1601.5	1662.8	1732.9	1790.5	1795.6	1808.2	1762.2
10°	1405.6	1407.4	1417.7	1447.4	1488.7	1551.4	1635.0	1735.7	1751.1	1797.0	1757.6
12.5°	1317.4	1318.7	1332.2	1364.3	1408.4	1471.5	1559.3	1675.8	1699.5	1783.1	1756.6
15°	1254.7	1259.8	1271.8	1305.3	1352.2	1414.9	1504.9	1631.7	1660.0	1778.0	1765.0
17.5°	1233.8	1239.3	1243.1	1267.2	1309.9	1371.2	1463.6	1602.9	1635.0	1780.8	1781.2
20°	1255.6	1259.8	1251.4	1257.5	1283.9	1338.7	1428.8	1578.3	1616.4	1784.0	1802.1
22.5°	1336.9	1338.7	1316.0	1289.5	1284.8	1315.0	1401.4	1558.8	1599.7	1792.8	1826.7
25°	1476.2	1472.9	1435.8	1378.6	1324.8	1310.9	1385.1	1546.7	1591.3	1802.1	1852.3
27.5°	1644.3	1648.9	1597.8	1514.7	1412.1	1338.7	1382.8	1541.6	1587.6	1808.6	1874.6
30°	1848.6	1855.1	1796.6	1692.1	1544.9	1407.4	1404.2	1540.7	1585.3	1804.5	1876.4
32.5°	2057.1	2064.9	2019.0	1911.3	1722.3	1522.6	1452.5	1550.9	1589.9	1790.1	1865.7
35°	2275.3	2286.4	2255.8	2163.4	1962.8	1688.8	1537.5	1582.0	1611.7	1788.7	1855.1
37.5°	2576.7	2586.9	2529.3	2431.3	2253.9	1911.7	1674.0	1640.5	1663.3	1811.0	1857.9
40°	3026.6	3025.2	2876.6	2726.6	2573.9	2195.0	1865.7	1746.4	1758.0	1878.3	1892.2
42.5°	3517.0	3514.6	3295.0	3067.0	2929.1	2543.7	2117.9	1929.4	1921.5	2002.3	1981.4
45°	3894.9	3894.5	3715.2	3458.5	3356.8	2944.0	2443.9	2183.8	2171.7	2203.8	2145.7
47.5°	4056.1	4058.9	3968.8	3788.1	3830.9	3485.4	2854.8	2552.5	2534.4	2521.4	2433.2
50°	3930.7	3936.3	3943.7	3908.4	4178.7	4213.0	3406.0	3072.1	3063.3	3005.3	2867.3
52.5°	3521.1	3549.5	3636.8	3748.7	4299.4	4911.4	4270.1	3717.6	3670.2	3608.4	3456.6
55°	2831.1	2862.2	3028.0	3299.6	4119.7	5370.2	5481.1	4549.7	4470.7	4286.4	4067.2
57.5°	1873.6	1921.9	2162.5	2507.9	3597.8	5444.0	6689.4	5704.5	5429.6	4924.9	4677.8
60°	1032.2	1078.7	1339.6	1652.6	2598.5	5079.0	7502.0	7208.1	6722.3	5638.6	5419.4
62.5°	635.7	660.8	853.5	1144.6	1558.3	4008.7	7670.1	9097.5	8535.2	6557.5	6315.1
65°	506.1	516.8	611.1	935.7	1117.2	2384.4	7127.3	10537.9	10350.3	7670.1	7117.0
67°	491.3	495.5	540.0	803.3	1053.1	1461.8	5971.0	10772.4	10962.8	8343.4	7142.1
67.5°	494.5	499.2	541.4	766.6	1051.3	1343.4	5572.6	10680.0	10920.5	8396.8	7031.1
70°	476.9	491.3	619.9	766.2	999.7	1116.3	3337.3	9253.5	9503.8	7802.0	5965.9
72.5°	169.0	170.0	267.9	619.9	1087.0	1128.4	1675.8	6783.6	6968.9	5968.2	4301.2
75°	100.3	85.4	89.2	176.5	1038.7	1095.9	966.8	4334.7	4403.9	3419.9	2178.3
77.5°	69.2	60.4	62.2	78.0	395.6	1080.5	768.0	2260.4	2186.6	1199.4	463.9
80°	39.5	34.8	37.1	68.3	143.9	1008.1	724.4	916.6	781.5	203.4	128.2
82.5°	20.9	17.6	21.4	56.2	100.3	628.3	725.8	443.0	351.0	68.7	87.3
85°	7.4	6.0	10.2	38.5	66.9	192.7	672.8	372.4	292.5	33.4	66.4
87.5°	1.4	1.4	4.2	15.8	26.9	59.0	397.9	221.0	148.1	20.0	45.5
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°	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7	1755.7
2.5°	1750.1	1730.2	1703.2	1670.3	1631.2	1596.9	1571.3	1544.9	1539.3	1530.0	1528.6
5°	1738.5	1704.2	1637.3	1560.7	1478.9	1405.1	1345.2	1291.8	1268.1	1247.7	1245.4
7.5°	1721.3	1669.8	1556.0	1432.5	1304.8	1188.7	1090.3	1020.6	956.6	925.9	921.3
10°	1701.4	1627.5	1464.5	1293.2	1116.8	952.8	806.6	684.0	609.7	565.6	560.0
12.5°	1682.8	1586.2	1371.2	1148.8	914.3	695.1	507.1	390.1	312.0	280.5	276.8
15°	1674.0	1552.8	1283.9	1001.1	702.6	442.5	277.2	214.5	189.0	181.6	181.1
17.5°	1673.0	1524.5	1198.5	848.4	492.2	257.2	180.6	164.8	159.7	157.9	157.9
20°	1672.6	1497.5	1113.0	690.0	312.5	171.3	150.4	146.7	143.0	140.7	140.7
22.5°	1677.7	1473.4	1023.9	528.4	196.9	138.8	132.3	128.6	124.0	120.7	120.3
25°	1682.8	1454.8	932.9	376.1	142.6	120.7	114.2	109.1	102.6	98.4	98.0
27.5°	1683.7	1431.6	835.4	251.7	119.3	105.4	97.0	89.2	81.7	77.5	77.1
30°	1669.8	1392.6	727.2	170.0	105.4	91.5	80.3	72.0	65.0	61.8	61.8
32.5°	1642.4	1344.3	608.3	128.2	93.8	78.5	66.4	58.5	53.9	52.5	52.0
35°	1617.8	1292.3	486.2	108.7	84.0	66.4	54.3	49.2	46.4	46.0	45.5
37.5°	1603.4	1250.5	371.5	98.4	74.8	55.7	46.0	42.3	40.9	39.9	40.4
40°	1614.5	1215.7	274.4	90.1	65.5	46.4	39.0	37.1	35.8	35.3	35.3
42.5°	1663.3	1209.6	203.8	82.7	56.7	38.5	33.9	32.5	31.6	31.1	31.6
45°	1791.4	1246.8	158.3	75.7	47.8	32.5	28.8	28.3	27.9	27.9	27.9
47.5°	1984.2	1323.4	131.9	67.8	39.9	27.9	25.1	24.6	24.1	24.6	24.6
50°	2310.6	1463.6	117.9	59.9	33.0	23.7	21.4	21.4	21.4	21.4	21.8
52.5°	2807.0	1739.4	108.7	52.0	26.9	20.0	18.1	18.1	18.6	18.6	19.0
55°	3360.0	2105.3	100.3	44.1	22.8	16.7	14.9	15.3	15.8	16.3	16.3
57.5°	3959.9	2510.7	93.3	36.2	19.5	13.5	12.5	13.0	13.5	14.4	14.4
60°	4683.9	2949.5	83.1	28.3	16.3	10.7	9.8	10.7	12.1	13.0	13.5
62.5°	5478.8	3373.9	70.1	22.3	13.5	8.4	7.9	9.8	11.6	12.5	13.0
65°	6022.1	3507.2	53.9	18.1	10.2	6.0	6.5	8.8	11.1	12.5	12.5
67°	5802.0	3179.8	44.1	15.3	8.4	4.6	6.0	8.8	11.1	12.1	12.5
67.5°	5649.2	3051.7	42.3	14.9	7.9	4.6	6.0	8.8	11.1	12.5	12.5
70°	4596.6	2292.5	35.3	11.1	6.5	4.2	5.1	8.4	10.7	12.1	12.1
72.5°	3193.8	1413.5	31.6	7.9	5.6	3.7	4.6	7.9	10.2	11.6	12.1
75°	1518.4	511.7	26.9	6.0	5.1	3.3	4.2	7.9	10.2	11.6	11.6
77.5°	309.7	118.9	21.8	5.1	4.2	3.3	3.7	7.4	9.8	11.1	11.1
80°	101.7	46.0	16.3	4.6	4.2	3.3	3.7	7.0	9.8	10.7	11.1
82.5°	73.4	23.2	10.7	4.6	4.2	3.3	3.3	7.0	9.3	10.7	10.7
85°	56.2	16.3	7.0	4.6	4.2	3.3	3.3	6.5	8.8	10.2	10.2
87.5°	37.1	6.5	5.6	4.6	4.2	3.3	3.3	6.5	8.4	9.8	10.2
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)