

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: P299582

Luminaire Tested: **GLNA-AF-02-LED-E1-SL2-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299582
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-SL2-7030-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 3000K 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: 8863 lumens
Efficiency: N/A
Efficacy: 78.4 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

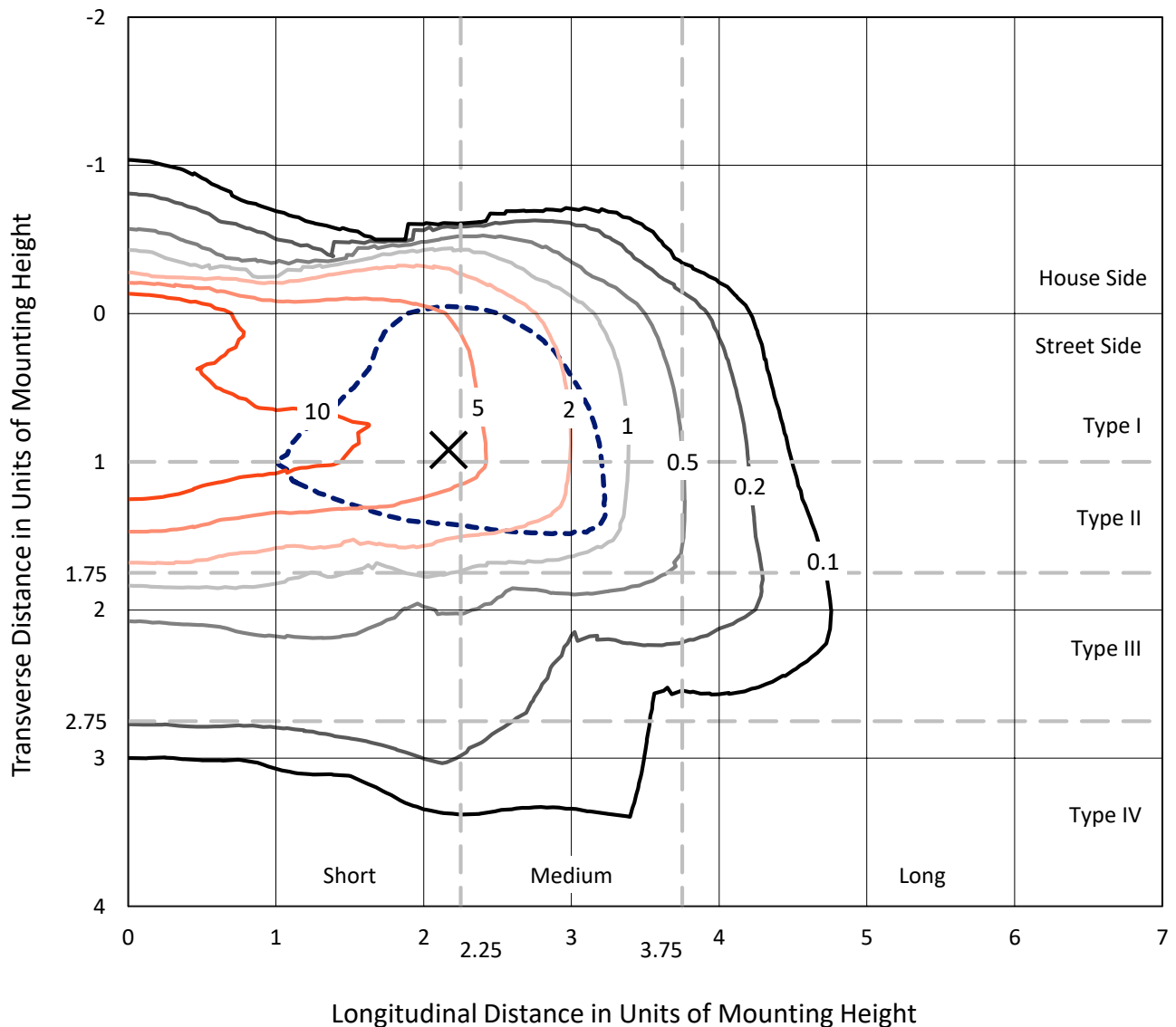


REPORT NUMBER: P299582

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

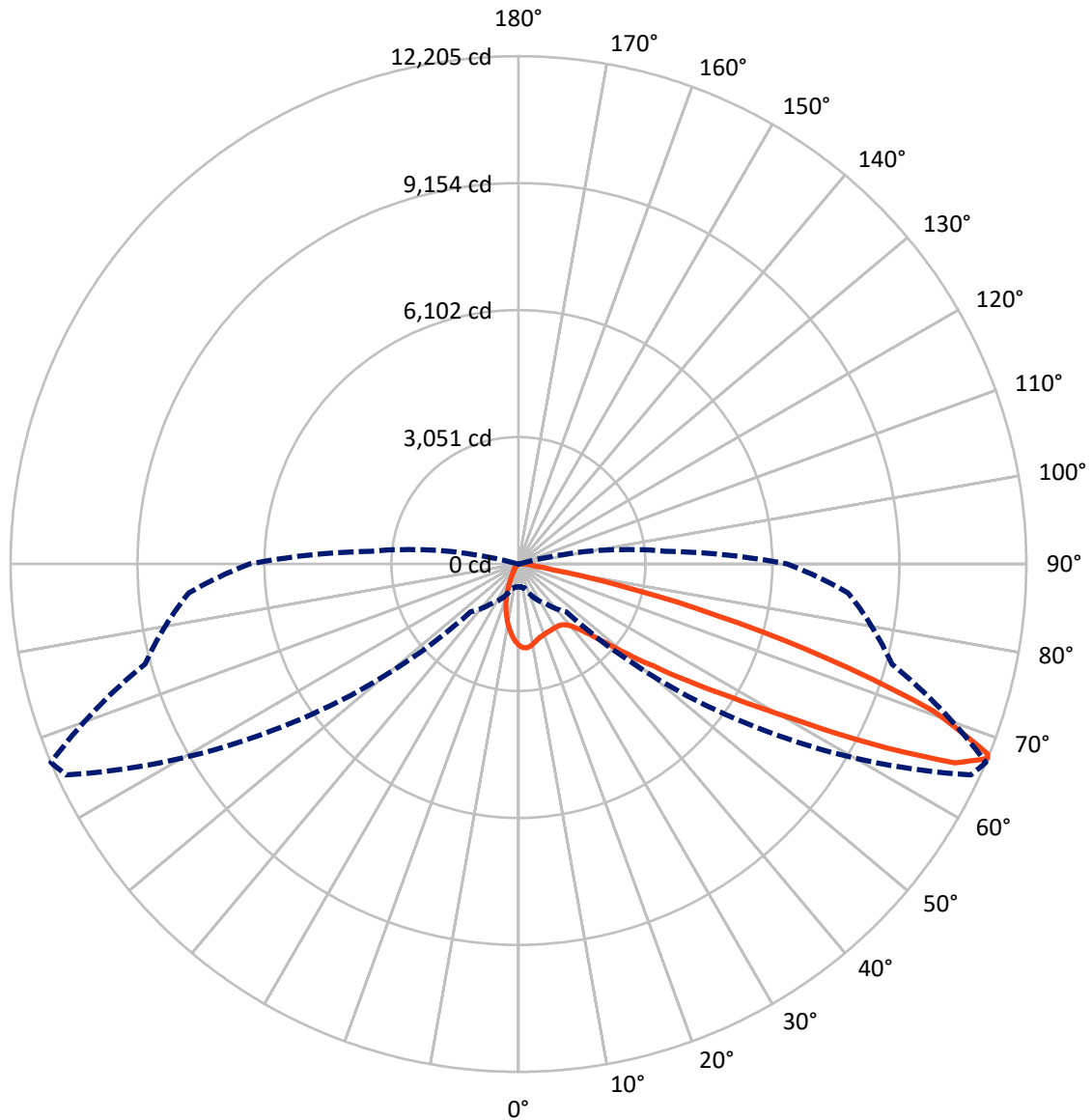
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 19.5 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299582
CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299582

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7030-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	920.3	0.0	920.3
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	7942.8	0.0	7942.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	8863.0	0.0	8863.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	1.8
10°-20°	338.5	3.8
20°-30°	492.2	5.6
30°-40°	767.8	8.7
40°-50°	1360.1	15.3
50°-60°	2152.2	24.3
60°-70°	2465.1	27.8
70°-80°	1022.5	11.5
80°-90°	105.6	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°	8863.0	100.0
0°-180°	8863.0	100.0

Coefficient of Utilization



REPORT NUMBER: P299582

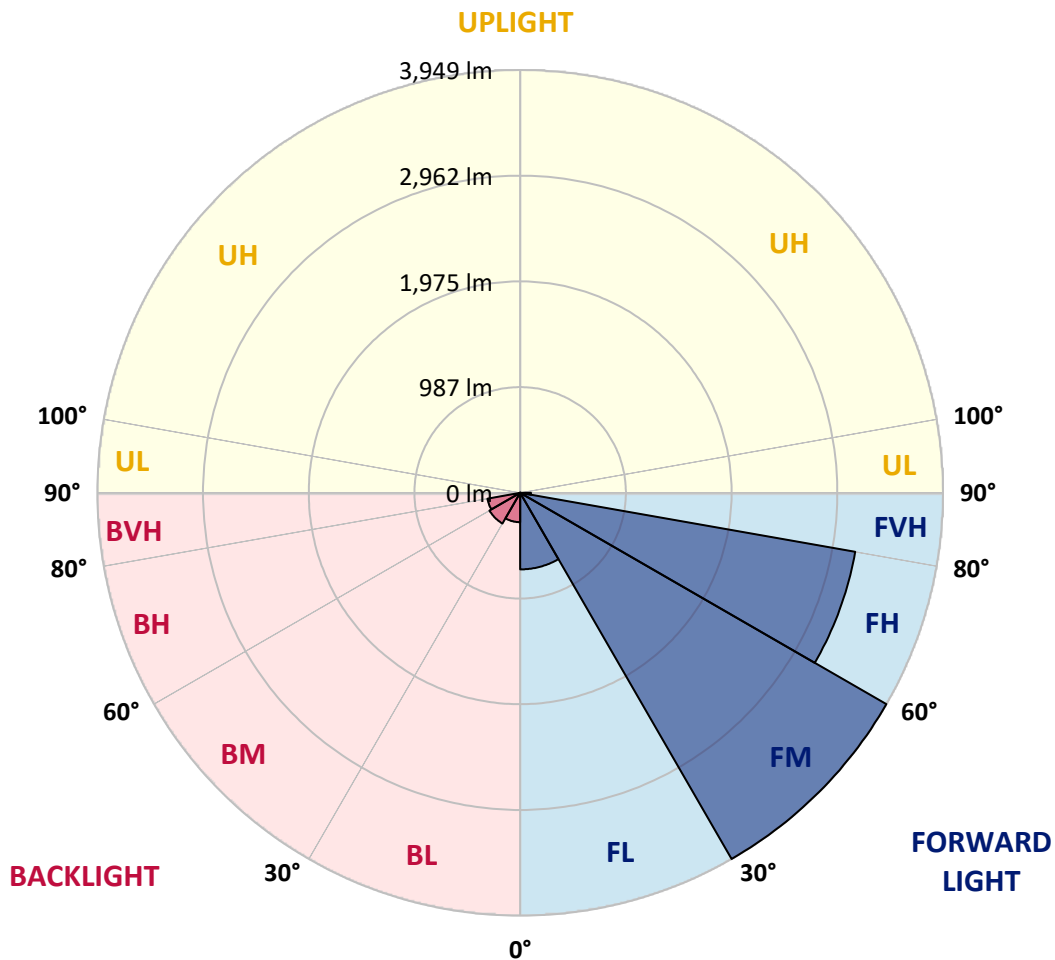
CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	715.1	8.1			
FM	(30°-60°)	3949.4	44.6			
FH	(60°-80°)	3177.4	35.9			G2/5000
FVH	(80°-90°)	100.9	1.1			G2/225
BL	(0°-30°)	274.6	3.1	B1/500		
BM	(30°-60°)	330.7	3.7	B1/1000		
BH	(60°-80°)	310.2	3.5	B1/500		G1/500
BVH	(80°-90°)	4.8	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





REPORT NUMBER: P299582

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6
2.5°	2020.8	2024.9	2024.4	2027.5	2034.7	2035.3	2028.0	2014.1	2011.0	1992.9	1961.3
5°	1863.6	1875.5	1882.8	1912.2	1945.3	1985.1	2015.1	2026.0	2024.4	2011.5	1963.9
7.5°	1684.2	1696.1	1704.4	1739.0	1783.0	1851.2	1929.3	1993.4	1999.1	2013.0	1961.9
10°	1564.8	1566.9	1578.3	1611.4	1657.4	1727.2	1820.2	1932.4	1949.4	2000.6	1956.7
12.5°	1466.6	1468.2	1483.2	1518.8	1567.9	1638.2	1735.9	1865.7	1892.1	1985.1	1955.7
15°	1396.8	1402.5	1415.9	1453.2	1505.4	1575.2	1675.5	1816.6	1848.1	1979.4	1965.0
17.5°	1373.6	1379.8	1383.9	1410.8	1458.3	1526.6	1629.5	1784.5	1820.2	1982.5	1983.0
20°	1397.9	1402.5	1393.2	1399.9	1429.4	1490.4	1590.7	1757.1	1799.5	1986.2	2006.3
22.5°	1488.3	1490.4	1465.1	1435.6	1430.4	1464.0	1560.2	1735.4	1780.9	1996.0	2033.7
25°	1643.4	1639.8	1598.4	1534.8	1474.9	1459.4	1542.1	1722.0	1771.6	2006.3	2062.1
27.5°	1830.5	1835.7	1778.9	1686.3	1572.1	1490.4	1539.5	1716.3	1767.5	2013.6	2087.0
30°	2058.0	2065.2	2000.1	1883.8	1719.9	1566.9	1563.3	1715.3	1764.9	2008.9	2089.0
32.5°	2290.1	2298.9	2247.7	2127.8	1917.4	1695.1	1617.0	1726.6	1770.1	1992.9	2077.1
35°	2533.1	2545.5	2511.4	2408.5	2185.2	1880.2	1711.6	1761.3	1794.4	1991.3	2065.2
37.5°	2868.6	2880.0	2815.9	2706.8	2509.3	2128.3	1863.6	1826.4	1851.7	2016.1	2068.3
40°	3369.5	3368.0	3202.6	3035.6	2865.5	2443.7	2077.1	1944.3	1957.2	2091.1	2106.6
42.5°	3915.4	3912.9	3668.3	3414.5	3261.0	2831.9	2357.8	2148.0	2139.2	2229.1	2205.9
45°	4336.2	4335.7	4136.2	3850.3	3737.1	3277.5	2720.7	2431.3	2417.8	2453.5	2388.9
47.5°	4515.6	4518.7	4418.4	4217.3	4264.9	3880.3	3178.3	2841.7	2821.6	2807.1	2708.9
50°	4376.0	4382.3	4390.5	4351.2	4652.1	4690.4	3791.9	3420.2	3410.4	3345.8	3192.2
52.5°	3920.1	3951.6	4048.8	4173.4	4786.5	5467.9	4753.9	4138.8	4086.0	4017.3	3848.2
55°	3151.9	3186.5	3371.1	3673.5	4586.4	5978.6	6102.2	5065.2	4977.3	4772.0	4528.0
57.5°	2085.9	2139.7	2407.5	2792.1	4005.4	6060.8	7447.3	6350.8	6044.8	5482.9	5207.8
60°	1149.2	1200.9	1491.4	1839.9	2892.9	5654.5	8352.0	8024.7	7484.0	6277.4	6033.4
62.5°	707.7	735.6	950.2	1274.3	1734.9	4462.9	8539.1	10128.2	9502.2	7300.5	7030.6
65°	563.5	575.4	680.3	1041.7	1243.8	2654.6	7934.8	11731.8	11523.0	8539.1	7923.4
67°	546.9	551.6	601.2	894.3	1172.5	1627.4	6647.6	11992.9	12204.9	9288.7	7951.3
67.5°	550.6	555.7	602.8	853.5	1170.4	1495.6	6204.0	11890.0	12157.8	9348.1	7827.8
70°	530.9	546.9	690.1	853.0	1113.0	1242.8	3715.4	10301.9	10580.6	8685.9	6641.9
72.5°	188.2	189.2	298.3	690.1	1210.2	1256.2	1865.7	7552.2	7758.5	6644.5	4788.6
75°	111.7	95.1	99.3	196.4	1156.4	1220.0	1076.3	4825.8	4902.8	3807.4	2425.0
77.5°	77.0	67.2	69.3	86.8	440.4	1203.0	855.0	2516.6	2434.4	1335.3	516.4
80°	43.9	38.8	41.4	76.0	160.3	1122.3	806.5	1020.5	870.0	226.4	142.7
82.5°	23.3	19.6	23.8	62.6	111.7	699.4	808.0	493.2	390.8	76.5	97.2
85°	8.3	6.7	11.4	42.9	74.4	214.5	749.1	414.6	325.7	37.2	73.9
87.5°	1.6	1.6	4.7	17.6	30.0	65.7	443.0	246.1	164.9	22.2	50.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299582

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6
2.5°	1948.4	1926.2	1896.2	1859.5	1816.1	1777.8	1749.4	1719.9	1713.7	1703.4	1701.8
5°	1935.5	1897.2	1822.8	1737.5	1646.5	1564.3	1497.6	1438.2	1411.8	1389.1	1386.5
7.5°	1916.4	1859.0	1732.3	1594.8	1452.7	1323.4	1213.8	1136.3	1064.9	1030.8	1025.6
10°	1894.1	1811.9	1630.5	1439.7	1243.3	1060.8	898.0	761.5	678.8	629.7	623.5
12.5°	1873.5	1765.9	1526.6	1279.0	1017.9	773.9	564.5	434.2	347.4	312.2	308.1
15°	1863.6	1728.7	1429.4	1114.6	782.2	492.7	308.6	238.8	210.4	202.1	201.6
17.5°	1862.6	1697.2	1334.3	944.5	548.0	286.4	201.1	183.5	177.8	175.8	175.8
20°	1862.1	1667.2	1239.1	768.2	347.9	190.8	167.5	163.4	159.2	156.6	156.6
22.5°	1867.8	1640.3	1139.9	588.3	219.2	154.6	147.3	143.2	138.0	134.4	133.9
25°	1873.5	1619.6	1038.6	418.7	158.7	134.4	127.2	121.5	114.2	109.6	109.1
27.5°	1874.5	1593.8	930.0	280.2	132.9	117.3	108.0	99.3	91.0	86.3	85.8
30°	1859.0	1550.4	809.6	189.2	117.3	101.8	89.4	80.1	72.4	68.8	68.8
32.5°	1828.5	1496.6	677.2	142.7	104.4	87.4	73.9	65.1	60.0	58.4	57.9
35°	1801.1	1438.7	541.3	121.0	93.6	73.9	60.5	54.8	51.7	51.2	50.7
37.5°	1785.1	1392.2	413.6	109.6	83.2	62.0	51.2	47.0	45.5	44.5	45.0
40°	1797.5	1353.4	305.5	100.3	72.9	51.7	43.4	41.4	39.8	39.3	39.3
42.5°	1851.7	1346.7	226.9	92.0	63.1	42.9	37.7	36.2	35.2	34.6	35.2
45°	1994.4	1388.0	176.3	84.3	53.2	36.2	32.1	31.5	31.0	31.0	31.0
47.5°	2209.0	1473.3	146.8	75.5	44.5	31.0	27.9	27.4	26.9	27.4	27.4
50°	2572.4	1629.5	131.3	66.7	36.7	26.4	23.8	23.8	23.8	23.8	24.3
52.5°	3125.0	1936.5	121.0	57.9	30.0	22.2	20.2	20.2	20.7	20.7	21.2
55°	3740.7	2343.9	111.7	49.1	25.3	18.6	16.5	17.1	17.6	18.1	18.1
57.5°	4408.6	2795.2	103.9	40.3	21.7	15.0	14.0	14.5	15.0	16.0	16.0
60°	5214.6	3283.7	92.5	31.5	18.1	11.9	10.9	11.9	13.4	14.5	15.0
62.5°	6099.6	3756.2	78.1	24.8	15.0	9.3	8.8	10.9	12.9	14.0	14.5
65°	6704.4	3904.6	60.0	20.2	11.4	6.7	7.2	9.8	12.4	14.0	14.0
67°	6459.4	3540.1	49.1	17.1	9.3	5.2	6.7	9.8	12.4	13.4	14.0
67.5°	6289.3	3397.4	47.0	16.5	8.8	5.2	6.7	9.8	12.4	14.0	14.0
70°	5117.4	2552.2	39.3	12.4	7.2	4.7	5.7	9.3	11.9	13.4	13.4
72.5°	3555.6	1573.6	35.2	8.8	6.2	4.1	5.2	8.8	11.4	12.9	13.4
75°	1690.5	569.7	30.0	6.7	5.7	3.6	4.7	8.8	11.4	12.9	12.9
77.5°	344.8	132.3	24.3	5.7	4.7	3.6	4.1	8.3	10.9	12.4	12.4
80°	113.2	51.2	18.1	5.2	4.7	3.6	4.1	7.8	10.9	11.9	12.4
82.5°	81.7	25.8	11.9	5.2	4.7	3.6	3.6	7.8	10.3	11.9	11.9
85°	62.6	18.1	7.8	5.2	4.7	3.6	3.6	7.2	9.8	11.4	11.4
87.5°	41.4	7.2	6.2	5.2	4.7	3.6	3.6	7.2	9.3	10.9	11.4
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)