

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-02-LED-E1-SL3-800-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-02-LED-E1-SL3-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 800mA 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: 7635.2 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

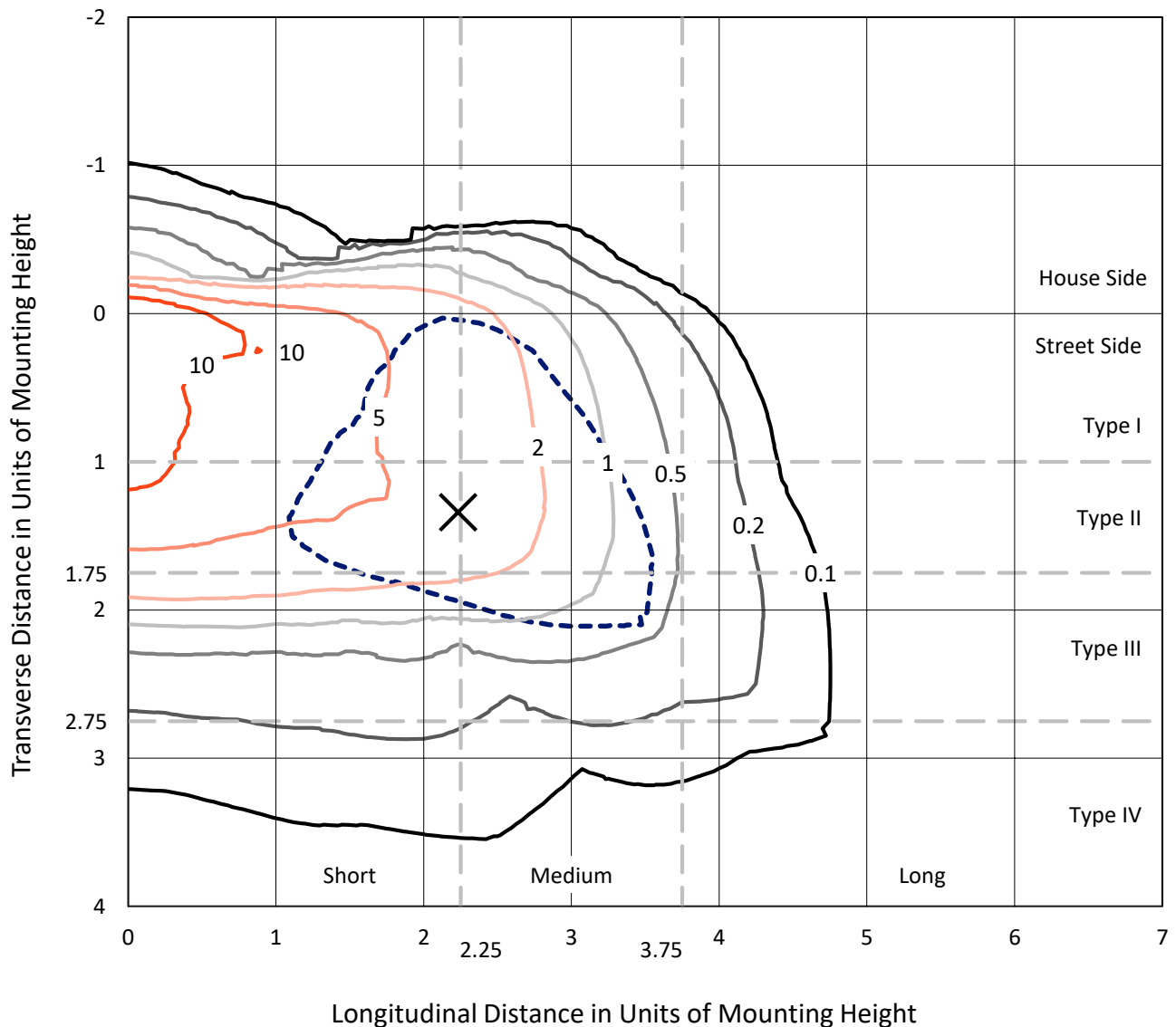
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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 CATALOG NUMBER: GLNA-AF-02-LED-E1-SL3-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

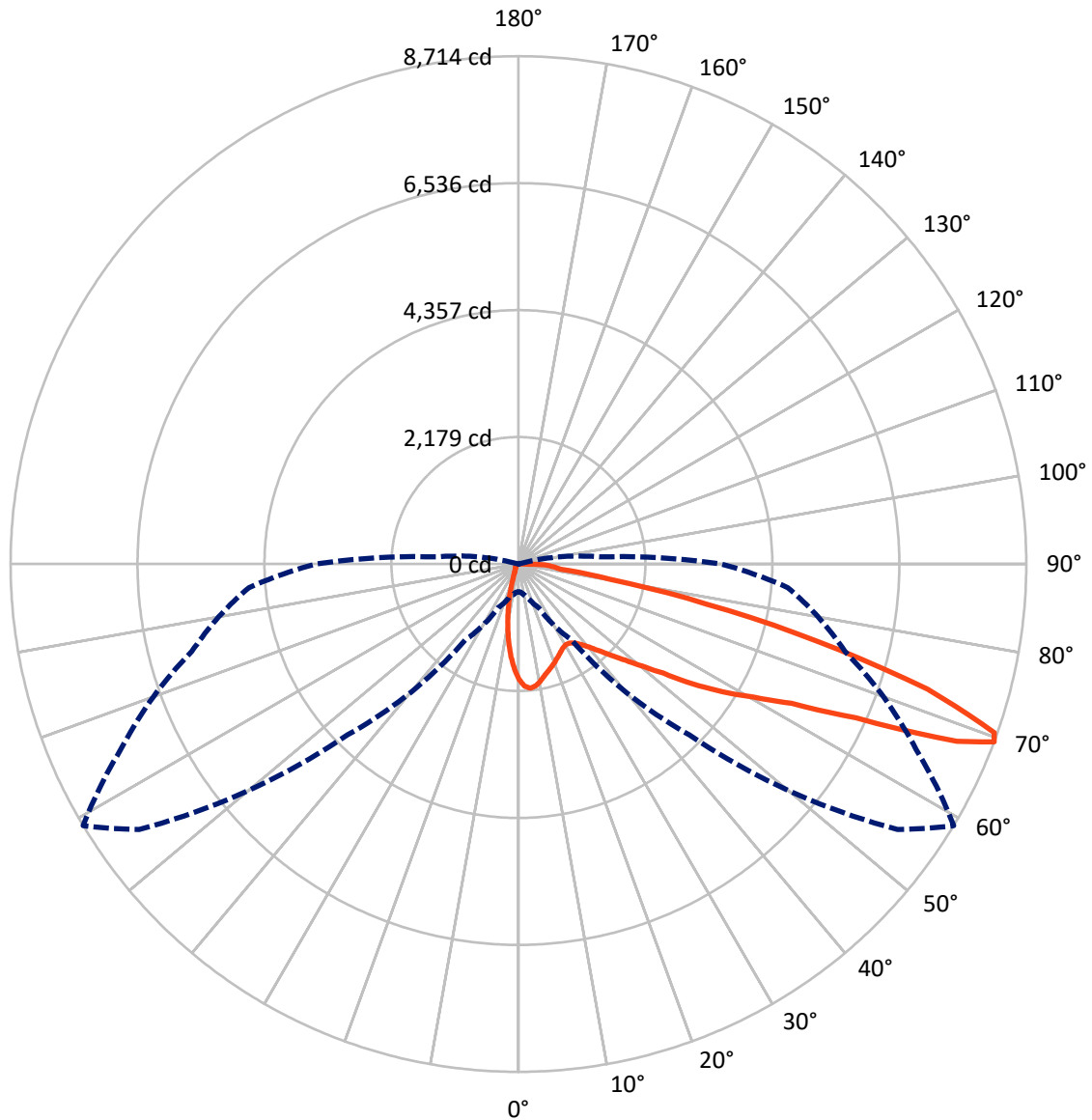


Based on 10 foot mounting height. Maximum calculated value = 20 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

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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	621.8	0.0	621.8
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	7013.4	0.0	7013.4
	% Fixture	91.9	0.0	91.9
Total	Lumens	7635.2	0.0	7635.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.3	2.1
10°-20°	333.3	4.4
20°-30°	448.5	5.9
30°-40°	651.2	8.5
40°-50°	1084.3	14.2
50°-60°	1691.5	22.2
60°-70°	2093.1	27.4
70°-80°	1060.8	13.9
80°-90°	111.0	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°	7635.2	100.0
0°-180°	7635.2	100.0



REPORT NUMBER: P299995

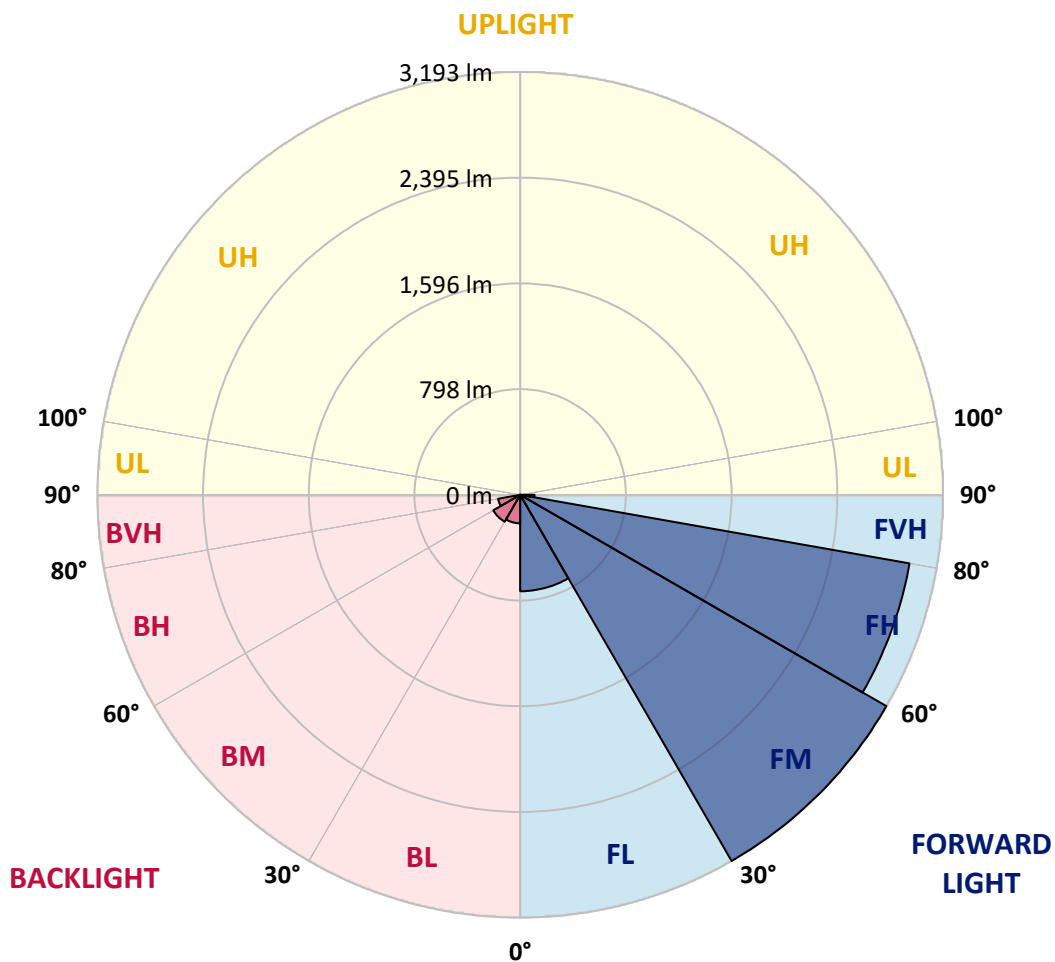
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	727.9	9.5			
FM	(30°-60°)	3192.8	41.8			
FH	(60°-80°)	2985.1	39.1			G2/5000
FVH	(80°-90°)	107.6	1.4			G2/225
BL	(0°-30°)	215.2	2.8	B1/500		
BM	(30°-60°)	234.3	3.1	B1/1000		
BH	(60°-80°)	168.8	2.2	B1/500		G1/500
BVH	(80°-90°)	3.4	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-G2

Type III Short





REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL3-800-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3
2.5°	2178.1	2177.4	2167.8	2163.5	2155.7	2139.3	2113.8	2100.5	2078.9	2041.3	1990.8
5°	2158.3	2168.7	2174.2	2174.7	2180.4	2174.2	2151.3	2140.2	2110.4	2049.9	1959.3
7.5°	2023.6	2027.4	2043.5	2057.2	2084.0	2109.5	2117.7	2112.9	2095.3	2030.6	1910.0
10°	1879.5	1883.2	1902.3	1920.4	1956.7	1995.9	2037.4	2046.1	2053.4	2002.8	1862.6
12.5°	1755.0	1758.9	1778.4	1802.1	1844.4	1892.8	1957.1	1971.3	2003.8	1976.6	1824.5
15°	1648.0	1649.7	1668.7	1698.0	1748.6	1810.7	1883.8	1906.6	1956.3	1958.0	1791.3
17.5°	1556.8	1561.2	1572.9	1600.9	1656.2	1733.0	1818.1	1851.0	1909.1	1942.5	1758.9
20°	1501.2	1505.5	1505.1	1520.6	1570.3	1652.3	1752.5	1791.7	1862.6	1926.5	1730.0
22.5°	1490.4	1490.4	1479.2	1477.0	1506.4	1575.0	1684.3	1732.1	1820.6	1919.6	1709.8
25°	1528.9	1527.0	1499.1	1476.2	1477.5	1518.4	1618.1	1675.1	1785.3	1924.3	1698.9
27.5°	1610.0	1607.8	1572.4	1528.9	1493.8	1493.4	1568.1	1629.4	1757.2	1946.8	1703.2
30°	1722.2	1721.4	1683.0	1628.1	1564.7	1506.4	1550.8	1606.5	1739.1	1987.3	1713.2
32.5°	1844.8	1843.5	1814.6	1756.8	1676.4	1564.7	1569.0	1615.7	1744.3	2041.3	1737.4
35°	1974.9	1972.7	1960.1	1909.6	1821.2	1672.1	1628.6	1664.8	1777.1	2122.1	1784.8
37.5°	2115.5	2117.7	2126.8	2078.4	1985.6	1822.9	1728.3	1752.9	1843.1	2231.7	1862.1
40°	2323.2	2322.8	2325.9	2262.3	2173.0	2007.2	1867.7	1875.5	1953.7	2377.2	1979.6
42.5°	2700.1	2673.8	2594.0	2464.4	2374.6	2217.9	2043.5	2035.3	2088.9	2557.2	2144.0
45°	3206.6	3150.4	2943.2	2695.0	2580.1	2455.4	2259.7	2233.4	2267.6	2773.6	2347.0
47.5°	3642.2	3583.9	3290.8	2935.0	2798.1	2680.7	2513.2	2465.7	2477.0	3015.8	2604.3
50°	3790.3	3761.8	3505.8	3144.0	3009.2	2964.4	2807.3	2749.4	2733.4	3295.9	2902.6
52.5°	3738.9	3736.8	3566.2	3279.6	3202.7	3258.0	3177.2	3110.3	3051.6	3591.3	3206.1
55°	3656.4	3667.3	3590.8	3398.3	3395.6	3526.1	3683.2	3627.5	3457.5	3912.1	3467.8
57.5°	3429.0	3475.1	3577.1	3622.8	3729.0	3862.4	4104.6	4137.5	3936.3	4157.7	3684.9
60°	2782.2	2883.6	3216.9	3655.1	4158.6	4491.0	4613.3	4641.2	4329.1	4361.9	3978.1
62.5°	1974.9	2078.4	2501.1	3242.4	4165.0	5316.9	5370.9	5260.8	4761.8	4664.6	4483.7
65°	1048.2	1128.2	1473.6	2340.5	3611.2	5508.7	6696.0	6367.9	5525.0	5259.9	5136.9
67.5°	536.2	560.4	697.8	1145.5	2482.6	4893.0	7883.7	8114.7	6840.6	5850.6	5105.4
69°	474.5	488.8	579.9	828.1	1589.7	4144.4	7941.6	8714.4	7529.3	5801.4	4639.5
70°	459.3	471.9	554.8	749.5	1242.6	3475.5	7720.0	8661.7	7705.4	5614.0	4291.6
72.5°	389.9	400.6	494.0	662.3	1009.9	1725.2	6271.2	7339.8	6914.4	4676.7	3106.4
75°	260.8	296.2	474.1	620.9	939.5	980.1	4134.5	5304.0	4927.1	3154.3	1618.1
77.5°	62.6	67.3	133.9	494.0	859.2	862.6	2126.4	3297.2	2689.4	1124.3	382.5
80°	33.7	32.4	37.5	98.0	800.0	809.5	957.2	1600.5	960.2	186.5	126.0
82.5°	23.8	22.5	24.2	41.0	251.8	737.4	692.5	724.4	398.0	71.6	56.6
85°	8.6	8.2	13.3	37.1	79.0	423.9	711.5	597.5	322.5	32.8	41.4
87.5°	3.0	2.6	5.2	20.3	24.2	180.5	439.1	451.6	126.9	19.9	19.5
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°	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3	1987.3
2.5°	1969.6	1942.8	1893.7	1843.1	1796.4	1740.4	1712.3	1684.7	1673.0	1668.7	1648.5
5°	1912.7	1867.3	1762.9	1657.9	1561.2	1458.4	1390.7	1336.3	1304.3	1288.7	1264.2
7.5°	1839.7	1765.5	1606.9	1445.1	1294.4	1145.9	1035.8	951.1	892.8	864.8	839.3
10°	1768.9	1670.0	1444.7	1224.0	1019.3	822.5	670.4	560.4	490.1	457.6	437.0
12.5°	1705.5	1577.2	1288.0	1008.6	751.6	521.2	366.5	279.0	235.3	220.1	212.8
15°	1648.9	1491.7	1139.9	803.9	509.0	297.9	200.4	170.6	163.7	163.7	162.7
17.5°	1595.3	1408.0	996.8	611.8	319.5	182.2	152.4	148.5	148.5	150.2	150.2
20°	1543.9	1328.1	858.7	439.1	201.2	144.6	137.8	136.9	137.8	139.9	139.9
22.5°	1499.8	1255.5	729.7	301.3	149.4	130.3	126.9	125.6	126.0	127.3	128.2
25°	1467.0	1194.2	608.0	204.2	128.6	118.7	114.9	112.7	111.0	111.0	111.8
27.5°	1446.4	1142.5	490.1	148.5	115.7	108.0	101.8	98.4	94.5	92.4	93.2
30°	1431.2	1093.2	379.5	121.3	103.7	95.8	88.1	82.5	76.9	74.2	75.2
32.5°	1425.6	1053.4	283.7	107.1	92.8	84.2	74.6	67.3	61.3	59.1	59.6
35°	1440.8	1021.9	207.7	96.7	84.2	73.3	62.6	54.4	49.7	48.4	48.8
37.5°	1480.5	1005.1	155.4	88.1	76.5	64.3	52.3	44.4	41.4	41.4	41.8
40°	1555.5	1004.7	124.8	82.1	69.5	55.7	43.1	37.5	35.8	36.7	37.1
42.5°	1665.2	1027.6	108.8	76.5	63.5	47.5	35.8	31.9	31.5	32.4	32.8
45°	1815.0	1069.4	100.1	71.6	57.0	39.7	30.2	27.6	27.6	28.9	29.4
47.5°	1998.5	1130.7	92.8	66.9	50.5	33.2	25.9	24.2	24.6	25.9	26.3
50°	2219.6	1208.1	85.5	61.7	45.8	27.6	22.5	21.2	21.6	23.3	23.8
52.5°	2471.3	1312.1	79.5	57.0	39.7	22.9	19.0	18.2	19.0	20.8	21.2
55°	2687.2	1405.3	72.2	53.1	31.9	19.0	15.6	15.6	16.5	18.6	19.0
57.5°	2894.9	1502.9	65.6	45.8	25.1	15.2	12.9	13.3	14.6	16.9	17.3
60°	3199.7	1668.2	57.9	38.4	19.0	12.0	10.8	11.2	12.9	15.2	15.6
62.5°	3717.3	1920.0	50.1	31.9	14.6	9.5	8.6	9.5	11.6	14.2	14.6
65°	4184.5	2022.3	41.0	26.8	11.2	7.3	7.3	8.6	11.2	13.9	14.2
67.5°	3924.1	1702.3	31.9	21.2	8.6	5.6	6.0	8.2	10.8	13.9	14.2
69°	3470.4	1392.0	27.2	16.9	7.3	5.2	5.6	8.2	10.8	13.3	13.9
70°	3116.8	1175.3	24.2	14.2	6.5	5.2	5.6	7.7	10.8	13.3	13.9
72.5°	2087.6	634.6	19.5	10.3	6.0	4.7	4.7	7.7	10.3	12.9	13.3
75°	897.1	175.3	15.6	7.3	5.2	4.3	4.3	7.3	9.9	12.5	13.3
77.5°	164.1	44.4	12.5	6.5	5.2	4.3	3.9	6.9	9.5	12.0	12.5
80°	65.2	22.0	9.9	5.6	4.7	3.9	3.4	6.5	9.0	11.6	12.0
82.5°	39.3	12.5	8.2	5.2	4.7	3.4	3.0	5.6	8.6	11.2	11.6
85°	31.9	8.6	6.5	5.2	4.3	3.4	2.6	5.2	7.7	10.8	11.2
87.5°	15.6	6.0	6.0	4.7	4.3	3.4	2.6	4.7	7.3	10.3	10.8
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)