

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: P300975

Luminaire Tested: **GLNA-AF-03-LED-E1-SL4-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300975  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-SL4-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

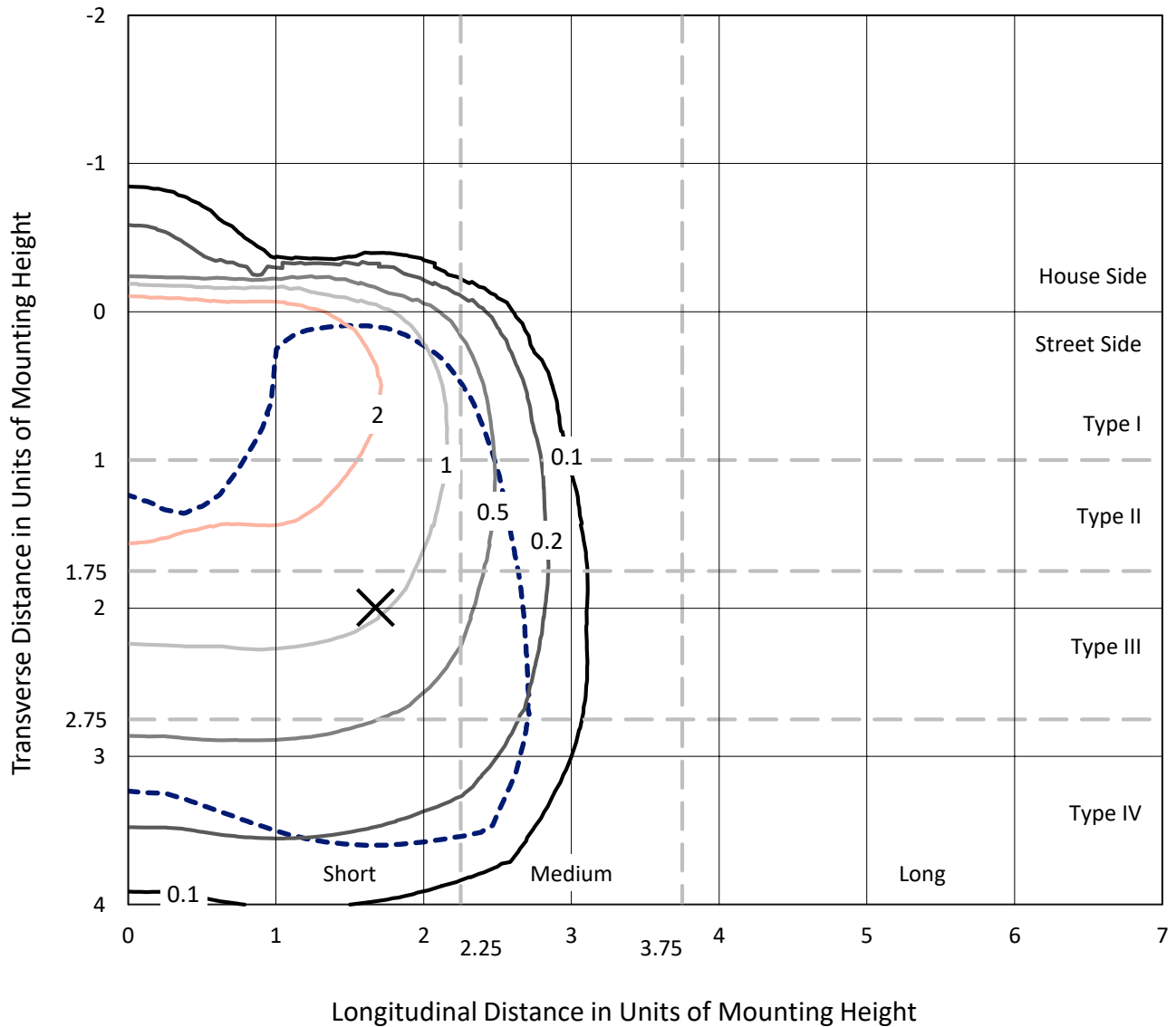
Lumens per Lamp: N/A  
Luminaire Lumens: 11335.5 lumens  
Efficiency: N/A  
Efficacy: 118.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (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

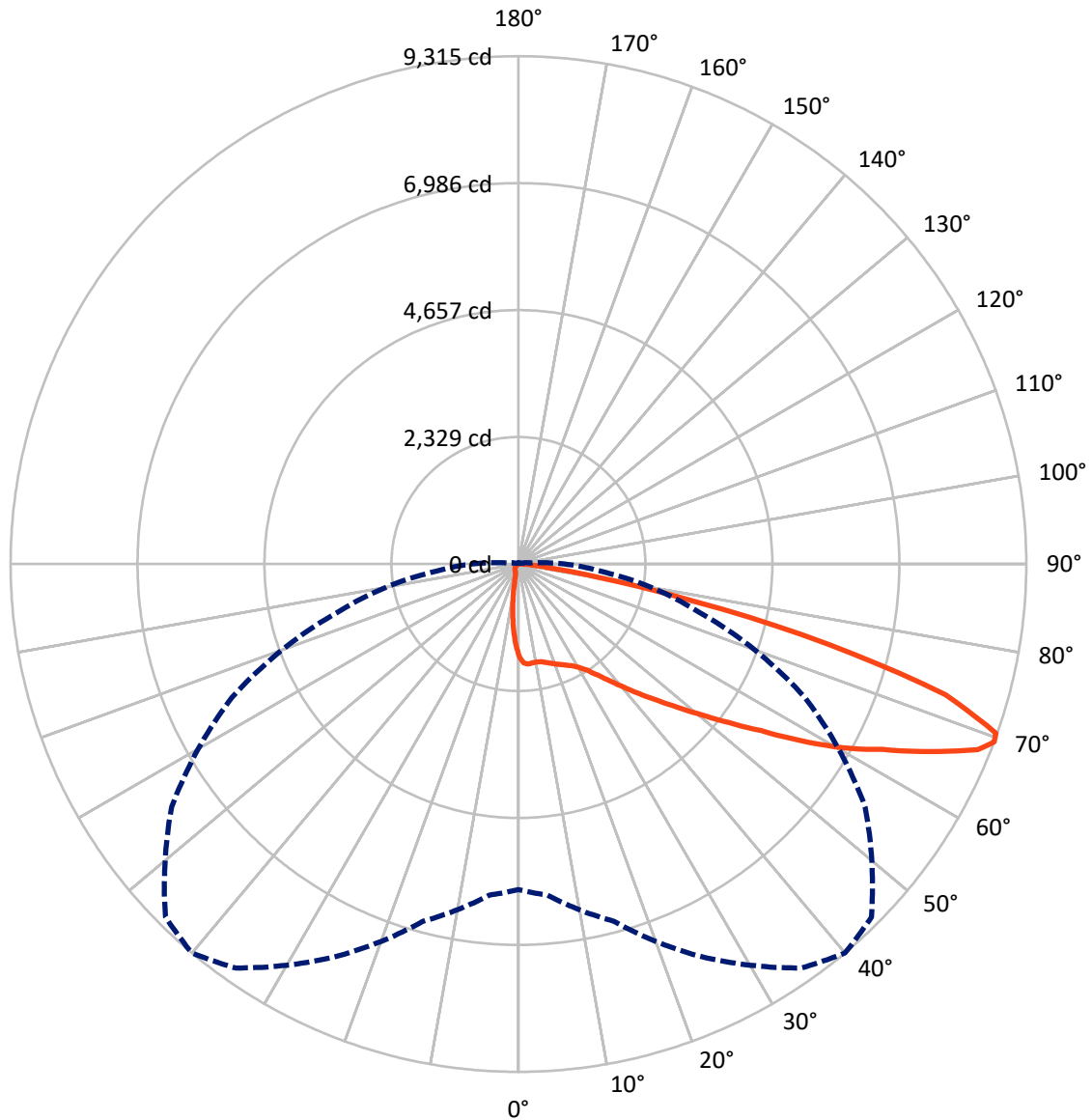
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.6 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	663.2	0.0	663.2
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	10672.3	0.0	10672.3
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	11335.5	0.0	11335.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	1.2
10°-20°	337.7	3.0
20°-30°	568.8	5.0
30°-40°	931.1	8.2
40°-50°	1612.2	14.2
50°-60°	2539.3	22.4
60°-70°	3316.3	29.3
70°-80°	1708.0	15.1
80°-90°	184.8	1.6
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°	11335.5	100.0
0°-180°	11335.5	100.0



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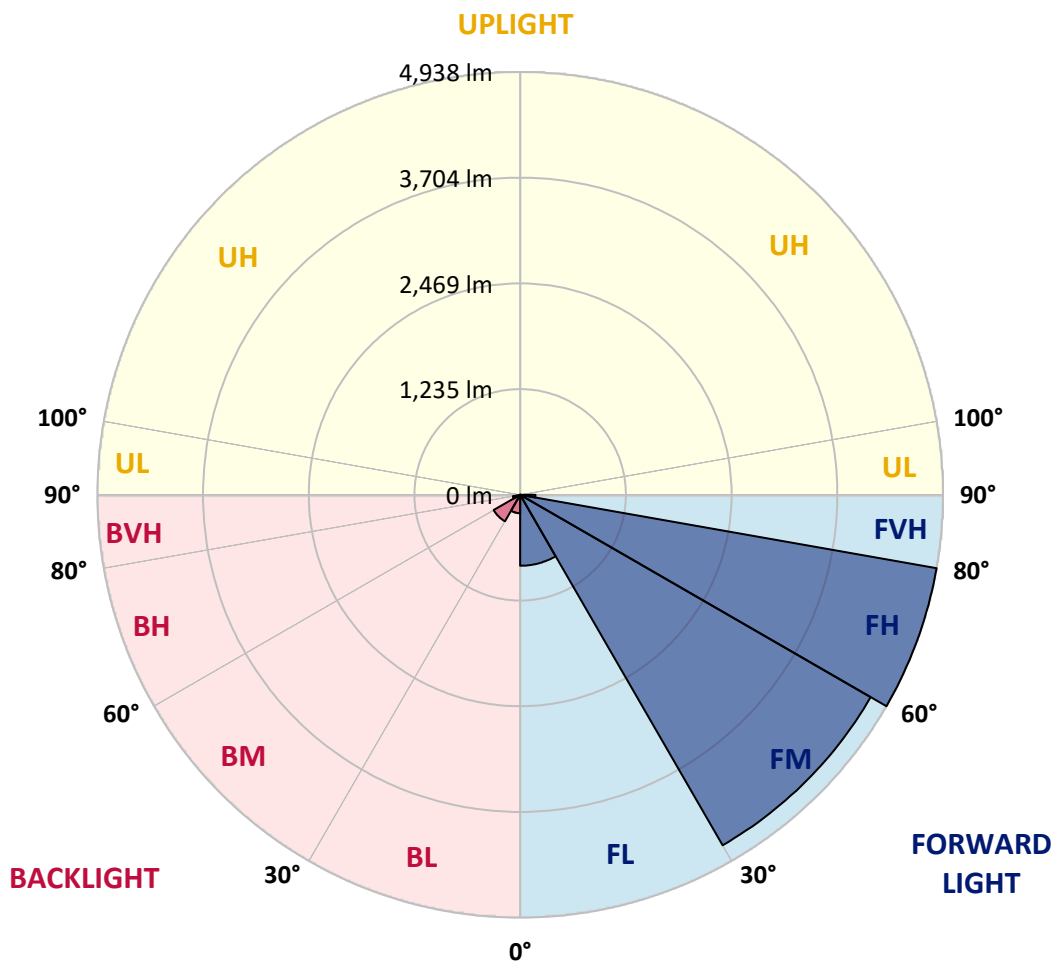
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	828.9	7.3			
FM	(30°-60°)	4726.2	41.7			
FH	(60°-80°)	4938.2	43.6			G2/5000
FVH	(80°-90°)	179.0	1.6			G2/225
BL	(0°-30°)	214.8	1.9	B1/500		
BM	(30°-60°)	356.4	3.1	B1/1000		
BH	(60°-80°)	86.1	0.8	B0/110		G0/110
BVH	(80°-90°)	5.8	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6
2.5°	1859.6	1849.4	1843.4	1835.3	1825.2	1816.4	1813.0	1788.0	1764.4	1732.0	1694.9
5°	1894.0	1890.6	1879.8	1869.0	1856.9	1843.4	1835.9	1806.3	1772.5	1725.3	1660.5
7.5°	1897.3	1893.3	1879.8	1865.0	1848.1	1831.9	1819.1	1789.4	1758.4	1710.4	1631.5
10°	1891.9	1887.2	1877.1	1860.9	1840.0	1824.5	1811.7	1783.3	1757.0	1713.8	1626.1
12.5°	1885.9	1881.2	1876.4	1868.3	1850.1	1839.3	1828.5	1801.5	1777.9	1741.5	1645.7
15°	1891.9	1889.2	1894.6	1891.3	1881.2	1871.7	1860.9	1836.6	1815.0	1784.7	1681.4
17.5°	1917.6	1917.6	1934.5	1936.5	1927.0	1913.5	1898.0	1873.7	1855.5	1829.9	1723.9
20°	1977.6	1975.6	1997.2	2001.3	1978.3	1957.4	1934.5	1904.8	1890.6	1874.4	1765.8
22.5°	2080.9	2071.4	2084.2	2080.2	2035.0	2002.6	1974.3	1937.8	1930.4	1923.0	1812.3
25°	2215.1	2209.7	2218.5	2178.7	2099.1	2055.2	2021.5	1980.3	1980.3	1987.8	1865.0
27.5°	2410.1	2389.9	2360.2	2290.0	2170.6	2114.6	2078.2	2034.3	2045.8	2073.5	1934.5
30°	2609.9	2587.6	2519.4	2411.5	2257.7	2199.0	2156.4	2110.6	2137.6	2188.2	2027.6
32.5°	2806.9	2781.9	2685.4	2549.1	2382.5	2323.8	2282.6	2232.0	2277.2	2362.2	2163.9
35°	2997.8	2975.6	2864.2	2703.7	2548.5	2499.9	2462.1	2418.2	2476.3	2595.0	2356.2
37.5°	3212.4	3188.1	3052.5	2878.4	2750.2	2715.1	2687.5	2643.6	2744.8	2918.9	2624.0
40°	3476.2	3435.1	3252.2	3078.8	2983.7	2966.8	2947.9	2941.8	3099.0	3339.9	2981.0
42.5°	3778.5	3711.0	3461.4	3290.0	3240.1	3252.2	3247.5	3274.5	3542.3	3863.5	3415.5
45°	4080.8	3993.7	3694.2	3515.4	3522.1	3564.6	3590.9	3698.9	4097.6	4464.0	3883.1
47.5°	4337.2	4251.5	3917.5	3758.9	3839.9	3923.6	3995.1	4199.5	4668.5	5055.1	4246.8
50°	4556.5	4475.5	4154.3	4026.8	4209.0	4343.9	4460.0	4762.9	5282.5	5505.1	4501.8
52.5°	4735.9	4682.0	4399.9	4333.8	4630.7	4828.4	4998.4	5361.4	5826.3	5870.8	4700.2
55°	4910.7	4872.2	4663.7	4698.8	5125.9	5395.2	5610.4	5996.3	6294.6	6175.8	4890.5
57.5°	5111.8	5076.7	4964.7	5161.7	5777.1	6115.8	6350.6	6559.1	6706.8	6487.5	5069.9
60°	5316.9	5296.6	5299.3	5675.8	6524.7	6849.9	6979.4	7033.4	7111.7	6781.1	5080.1
62.5°	5512.6	5551.0	5681.9	6248.0	7240.5	7490.2	7555.6	7609.0	7517.2	6827.6	4693.4
65°	5843.9	5906.6	6219.0	7013.8	8028.0	8295.2	8362.6	8179.8	7581.3	6225.8	3817.6
67.5°	6005.8	6120.5	6677.8	7727.7	8791.8	9088.6	9063.7	8216.9	6803.3	4747.4	2450.0
69°	5972.1	6094.2	6783.8	7946.3	9045.5	9314.7	9156.1	7762.8	5795.9	3439.1	1504.0
70°	5838.5	5961.9	6729.1	7938.2	9077.8	9291.1	8984.7	7202.1	4900.6	2514.7	940.6
72.5°	4875.6	4982.2	5974.1	7175.1	8362.6	8189.2	7516.5	4989.6	2387.9	684.9	211.9
75°	3001.2	3060.6	4286.6	5405.3	6316.2	5870.8	5007.9	2482.3	711.8	193.6	117.4
77.5°	1585.6	1612.6	2346.7	3186.1	4003.9	3312.9	2566.7	968.2	327.9	121.5	85.0
80°	937.2	957.4	1263.8	1456.7	1732.7	1447.3	1026.3	594.4	234.8	76.2	75.6
82.5°	536.4	549.2	916.3	809.7	682.8	583.0	510.8	563.4	141.0	51.3	78.3
85°	197.0	199.7	515.5	616.0	406.2	241.6	253.7	466.9	37.8	32.4	61.4
87.5°	91.8	89.7	265.2	377.2	237.5	153.2	197.7	102.6	14.8	20.9	16.9
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°	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6	1693.6
2.5°	1673.3	1648.4	1603.2	1556.6	1509.4	1472.9	1437.2	1408.8	1399.4	1381.9	1383.2
5°	1622.1	1576.2	1481.7	1385.9	1286.0	1203.7	1126.1	1063.4	1033.0	1002.0	1002.0
7.5°	1577.5	1510.7	1363.0	1207.1	1045.8	910.2	788.1	696.3	645.7	605.2	604.6
10°	1560.7	1470.2	1263.8	1040.4	815.8	630.9	485.8	392.7	344.8	313.8	312.4
12.5°	1568.1	1456.1	1187.5	886.6	604.6	405.5	281.4	221.3	201.1	191.6	191.6
15°	1589.7	1452.0	1111.3	736.1	427.1	253.7	186.9	170.7	169.4	169.4	169.4
17.5°	1616.0	1453.4	1033.0	589.7	290.8	181.5	161.3	159.2	160.6	160.6	160.6
20°	1643.0	1454.0	948.7	454.1	205.1	157.9	151.8	151.1	152.5	152.5	153.2
22.5°	1676.0	1457.4	864.3	339.4	169.4	149.1	144.4	144.4	145.1	145.1	144.4
25°	1713.8	1464.2	776.6	251.7	154.5	143.0	139.0	138.3	139.0	138.3	137.6
27.5°	1761.1	1473.6	678.8	197.0	147.8	137.0	133.6	133.6	132.9	132.2	131.6
30°	1820.4	1484.4	568.8	167.3	141.0	131.6	128.2	127.5	126.8	125.5	125.5
32.5°	1910.8	1508.0	460.2	151.8	133.6	124.2	121.5	121.5	120.1	118.8	118.1
35°	2049.8	1554.6	363.0	142.4	125.5	116.1	112.7	112.7	111.3	110.7	110.0
37.5°	2242.1	1625.4	282.0	133.6	117.4	107.3	103.9	103.2	101.9	100.5	99.9
40°	2497.9	1713.1	222.0	125.5	109.3	98.5	95.8	94.5	91.8	89.7	89.7
42.5°	2819.0	1813.0	180.2	116.7	99.9	90.4	88.4	86.4	81.6	79.6	78.9
45°	3155.0	1902.7	152.5	106.6	90.4	82.3	81.0	77.6	71.5	69.5	69.5
47.5°	3397.3	1923.7	134.3	97.2	81.6	73.5	72.9	66.8	61.4	60.1	59.4
50°	3548.4	1882.5	119.4	87.7	73.5	65.4	63.4	56.0	52.6	51.3	50.6
52.5°	3650.3	1809.0	107.3	79.6	66.1	58.0	53.3	47.9	45.2	43.9	43.9
55°	3731.9	1705.0	95.1	72.2	60.1	52.0	45.2	41.2	38.5	37.1	37.1
57.5°	3754.9	1564.0	83.0	66.1	54.0	45.9	38.5	35.8	32.4	31.7	31.7
60°	3588.2	1309.7	73.5	58.7	48.6	39.8	33.7	30.4	27.0	26.3	25.6
62.5°	3149.0	1013.4	64.8	52.0	42.5	34.4	29.0	25.0	22.3	22.3	22.3
65°	2402.0	679.5	56.7	45.2	37.1	29.0	25.0	20.2	18.9	18.9	19.6
67.5°	1437.9	369.8	48.6	38.5	31.7	24.3	20.9	17.5	16.9	17.5	17.5
69°	842.7	217.3	43.9	34.4	27.7	21.6	18.2	15.5	16.9	17.5	17.5
70°	520.2	146.4	40.5	31.0	25.0	19.6	16.9	14.8	16.2	16.9	16.9
72.5°	145.1	75.6	32.4	24.3	20.2	16.2	13.5	13.5	15.5	16.2	16.2
75°	94.5	56.0	25.0	18.2	15.5	12.8	11.5	12.8	14.8	15.5	15.5
77.5°	78.3	45.9	20.2	14.8	12.8	12.1	10.8	11.5	13.5	14.2	14.2
80°	71.5	32.4	16.2	13.5	11.5	10.8	10.1	9.4	12.1	12.8	12.8
82.5°	68.1	25.6	14.2	12.1	10.8	9.4	8.8	9.4	10.8	11.5	12.1
85°	42.5	16.9	12.8	11.5	9.4	8.8	8.8	8.8	10.1	10.8	10.8
87.5°	15.5	13.5	11.5	9.4	8.1	8.1	8.1	8.1	8.8	10.1	10.1
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)