

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: P300912

Luminaire Tested: **GLNA-AF-03-LED-E1-SL4-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300912
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-SL4-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12078 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G3

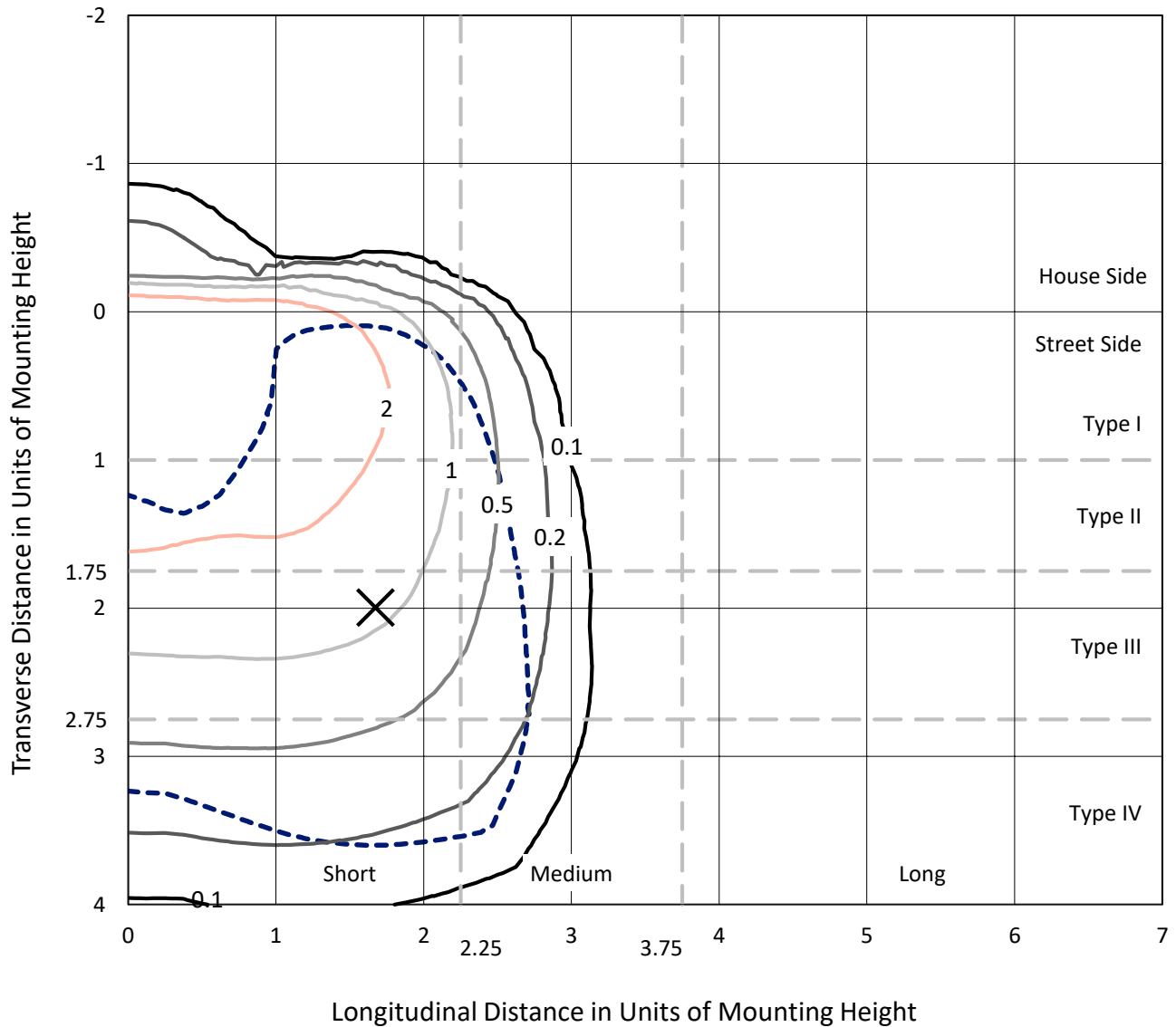
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

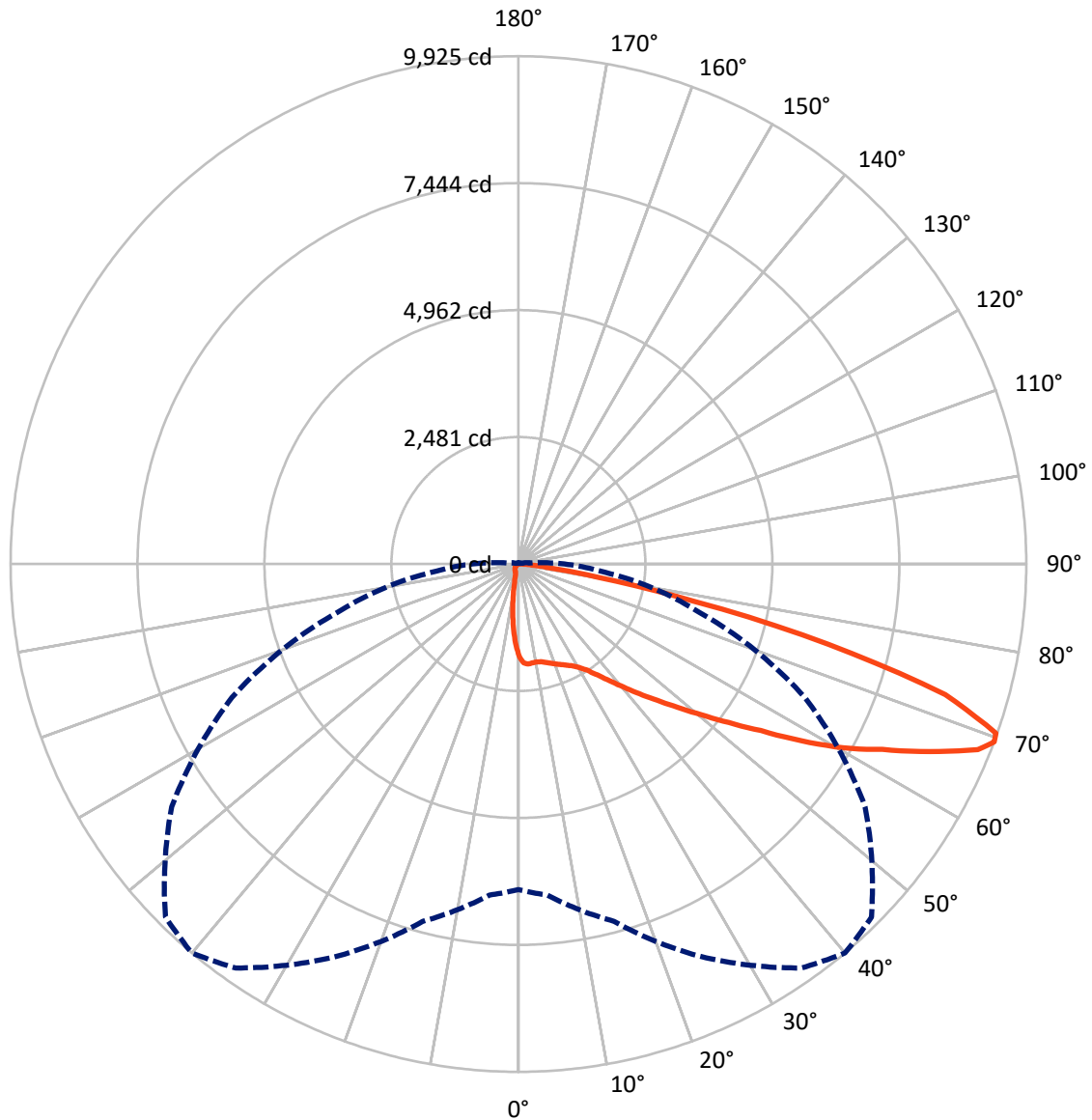
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.9 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
House Side	Lumens	706.6	0.0	706.6
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	11371.4	0.0	11371.4
	% Fixture	94.1	0.0	94.1
Total	Lumens	12078.0	0.0	12078.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	1.2
10°-20°	359.8	3.0
20°-30°	606.0	5.0
30°-40°	992.1	8.2
40°-50°	1717.8	14.2
50°-60°	2705.7	22.4
60°-70°	3533.5	29.3
70°-80°	1819.9	15.1
80°-90°	196.9	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°	12078.0	100.0
0°-180°	12078.0	100.0

Coefficient of Utilization



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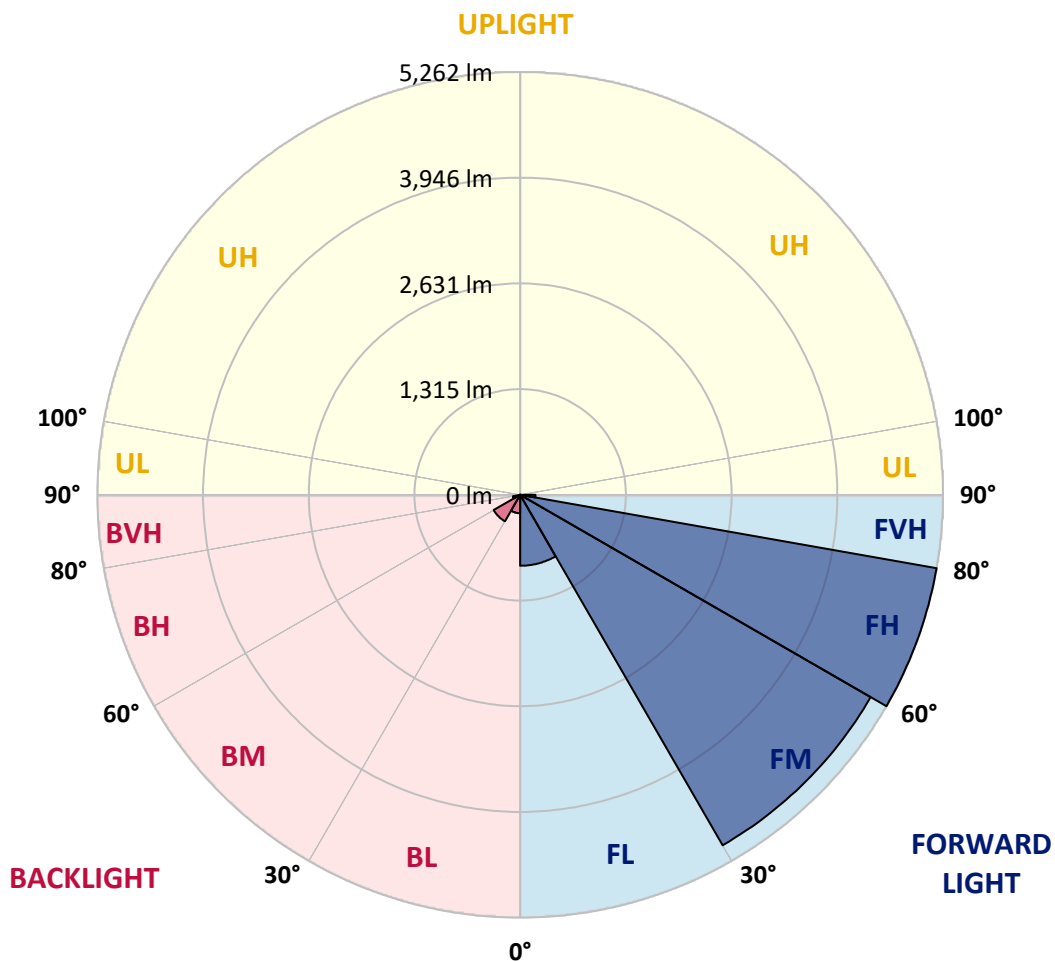
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	883.3	7.3			
FM	(30°-60°)	5035.8	41.7			
FH	(60°-80°)	5261.7	43.6			G3/7500
FVH	(80°-90°)	190.7	1.6			G2/225
BL	(0°-30°)	228.9	1.9	B1/500		
BM	(30°-60°)	379.8	3.1	B1/1000		
BH	(60°-80°)	91.8	0.8	B0/110		G0/110
BVH	(80°-90°)	6.2	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5
2.5°	1981.4	1970.6	1964.1	1955.5	1944.7	1935.4	1931.8	1905.2	1880.0	1845.5	1806.0
5°	2018.0	2014.4	2002.9	1991.4	1978.5	1964.1	1956.2	1924.6	1888.6	1838.3	1769.3
7.5°	2021.6	2017.3	2002.9	1987.1	1969.2	1951.9	1938.2	1906.6	1873.5	1822.5	1738.4
10°	2015.9	2010.9	2000.1	1982.8	1960.5	1944.0	1930.3	1900.1	1872.1	1826.1	1732.6
12.5°	2009.4	2004.4	1999.4	1990.7	1971.3	1959.8	1948.3	1919.5	1894.4	1855.6	1753.5
15°	2015.9	2013.0	2018.8	2015.2	2004.4	1994.3	1982.8	1956.9	1933.9	1901.6	1791.6
17.5°	2043.2	2043.2	2061.2	2063.3	2053.3	2038.9	2022.4	1996.5	1977.1	1949.7	1836.9
20°	2107.2	2105.0	2128.0	2132.4	2107.9	2085.6	2061.2	2029.5	2014.4	1997.2	1881.4
22.5°	2217.2	2207.1	2220.8	2216.5	2168.3	2133.8	2103.6	2064.8	2056.9	2049.0	1931.1
25°	2360.3	2354.5	2363.9	2321.4	2236.6	2189.9	2153.9	2110.1	2110.1	2118.0	1987.1
27.5°	2568.0	2546.5	2514.8	2440.1	2312.8	2253.1	2214.3	2167.6	2179.8	2209.3	2061.2
30°	2780.8	2757.1	2684.5	2569.5	2405.5	2343.0	2297.7	2248.8	2277.6	2331.5	2160.4
32.5°	2990.8	2964.2	2861.4	2716.1	2538.6	2476.0	2432.1	2378.2	2426.4	2517.0	2305.6
35°	3194.2	3170.5	3051.9	2880.8	2715.4	2663.6	2623.4	2576.7	2638.5	2765.0	2510.5
37.5°	3422.8	3397.0	3252.5	3067.0	2930.4	2893.0	2863.5	2816.8	2924.6	3110.1	2795.9
40°	3703.9	3660.1	3465.3	3280.5	3179.1	3161.1	3141.0	3134.5	3302.1	3558.7	3176.2
42.5°	4026.0	3954.1	3688.1	3505.5	3452.3	3465.3	3460.2	3489.0	3774.4	4116.6	3639.2
45°	4348.1	4255.4	3936.2	3745.6	3752.8	3798.1	3826.2	3941.2	4366.1	4756.5	4137.5
47.5°	4621.3	4530.0	4174.1	4005.2	4091.4	4180.6	4256.8	4474.6	4974.3	5386.2	4525.0
50°	4855.0	4768.7	4426.5	4290.6	4484.7	4628.5	4752.1	5074.9	5628.5	5865.8	4796.7
52.5°	5046.2	4988.7	4688.2	4617.7	4934.0	5144.7	5325.9	5712.6	6208.0	6255.4	5008.1
55°	5232.4	5191.4	4969.3	5006.6	5461.7	5748.6	5977.9	6389.2	6706.9	6580.4	5210.8
57.5°	5446.6	5409.2	5289.9	5499.8	6155.5	6516.4	6766.6	6988.7	7146.2	6912.5	5402.1
60°	5665.2	5643.6	5646.5	6047.7	6952.1	7298.6	7436.6	7494.2	7577.5	7225.3	5412.8
62.5°	5873.7	5914.7	6054.1	6657.3	7714.9	7980.9	8050.6	8107.4	8009.6	7274.9	5000.9
65°	6226.7	6293.5	6626.4	7473.3	8553.9	8838.6	8910.4	8715.6	8077.9	6633.6	4067.7
67.5°	6399.2	6521.4	7115.3	8233.9	9367.7	9684.0	9657.4	8755.2	7249.0	5058.4	2610.4
69°	6363.3	6493.4	7228.1	8466.9	9638.0	9924.9	9755.9	8271.3	6175.6	3664.4	1602.5
70°	6220.9	6352.5	7169.9	8458.2	9672.5	9899.7	9573.3	7673.9	5221.6	2679.5	1002.2
72.5°	5195.0	5308.6	6365.4	7645.1	8910.4	8725.7	8008.9	5316.5	2544.3	729.7	225.7
75°	3197.8	3261.1	4567.4	5759.4	6729.9	6255.4	5335.9	2645.0	758.5	206.3	125.1
77.5°	1689.5	1718.2	2500.4	3394.8	4266.1	3530.0	2734.8	1031.7	349.4	129.4	90.6
80°	998.6	1020.2	1346.6	1552.2	1846.2	1542.1	1093.5	633.4	250.2	81.2	80.5
82.5°	571.6	585.2	976.3	862.7	727.6	621.2	544.2	600.3	150.3	54.6	83.4
85°	209.9	212.8	549.3	656.4	432.8	257.4	270.3	497.5	40.3	34.5	65.4
87.5°	97.8	95.6	282.5	401.9	253.1	163.2	210.6	109.3	15.8	22.3	18.0
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°	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5	1804.5
2.5°	1783.0	1756.4	1708.2	1658.6	1608.3	1569.4	1531.3	1501.1	1491.1	1472.4	1473.8
5°	1728.3	1679.4	1578.8	1476.7	1370.3	1282.6	1199.9	1133.0	1100.7	1067.6	1067.6
7.5°	1680.9	1609.7	1452.2	1286.2	1114.3	969.8	839.7	741.9	688.0	644.9	644.2
10°	1662.9	1566.6	1346.6	1108.6	869.2	672.2	517.6	418.4	367.4	334.3	332.9
12.5°	1670.8	1551.5	1265.3	944.7	644.2	432.1	299.8	235.8	214.2	204.2	204.2
15°	1693.8	1547.1	1184.1	784.4	455.1	270.3	199.1	181.9	180.5	180.5	180.5
17.5°	1721.8	1548.6	1100.7	628.3	309.9	193.4	171.8	169.7	171.1	171.1	171.1
20°	1750.6	1549.3	1010.8	483.8	218.6	168.2	161.8	161.0	162.5	162.5	163.2
22.5°	1785.8	1552.9	921.0	361.6	180.5	158.9	153.9	153.9	154.6	154.6	153.9
25°	1826.1	1560.1	827.5	268.2	164.6	152.4	148.1	147.4	148.1	147.4	146.7
27.5°	1876.4	1570.1	723.2	209.9	157.4	145.9	142.3	142.3	141.6	140.9	140.2
30°	1939.7	1581.7	606.1	178.3	150.3	140.2	136.6	135.9	135.2	133.7	133.7
32.5°	2036.0	1606.8	490.3	161.8	142.3	132.3	129.4	129.4	128.0	126.5	125.8
35°	2184.1	1656.4	386.8	151.7	133.7	123.7	120.1	120.1	118.6	117.9	117.2
37.5°	2389.0	1731.9	300.5	142.3	125.1	114.3	110.7	110.0	108.6	107.1	106.4
40°	2661.5	1825.4	236.5	133.7	116.5	105.0	102.1	100.7	97.8	95.6	95.6
42.5°	3003.7	1931.8	192.0	124.4	106.4	96.3	94.2	92.0	87.0	84.8	84.1
45°	3361.7	2027.4	162.5	113.6	96.3	87.7	86.3	82.7	76.2	74.1	74.1
47.5°	3619.8	2049.7	143.1	103.5	87.0	78.4	77.6	71.2	65.4	64.0	63.3
50°	3780.9	2005.8	127.3	93.5	78.4	69.7	67.6	59.7	56.1	54.6	53.9
52.5°	3889.4	1927.5	114.3	84.8	70.5	61.8	56.8	51.0	48.2	46.7	46.7
55°	3976.4	1816.7	101.4	76.9	64.0	55.4	48.2	43.9	41.0	39.5	39.5
57.5°	4000.9	1666.5	88.4	70.5	57.5	48.9	41.0	38.1	34.5	33.8	33.8
60°	3823.3	1395.4	78.4	62.5	51.8	42.4	35.9	32.4	28.8	28.0	27.3
62.5°	3355.3	1079.8	69.0	55.4	45.3	36.7	30.9	26.6	23.7	23.7	23.7
65°	2559.4	724.0	60.4	48.2	39.5	30.9	26.6	21.6	20.1	20.1	20.8
67.5°	1532.0	394.0	51.8	41.0	33.8	25.9	22.3	18.7	18.0	18.7	18.7
69°	897.9	231.5	46.7	36.7	29.5	23.0	19.4	16.5	18.0	18.7	18.7
70°	554.3	156.0	43.1	33.1	26.6	20.8	18.0	15.8	17.3	18.0	18.0
72.5°	154.6	80.5	34.5	25.9	21.6	17.3	14.4	14.4	16.5	17.3	17.3
75°	100.7	59.7	26.6	19.4	16.5	13.7	12.2	13.7	15.8	16.5	16.5
77.5°	83.4	48.9	21.6	15.8	13.7	12.9	11.5	12.2	14.4	15.1	15.1
80°	76.2	34.5	17.3	14.4	12.2	11.5	10.8	10.1	12.9	13.7	13.7
82.5°	72.6	27.3	15.1	12.9	11.5	10.1	9.3	10.1	11.5	12.2	12.9
85°	45.3	18.0	13.7	12.2	10.1	9.3	9.3	9.3	10.8	11.5	11.5
87.5°	16.5	14.4	12.2	10.1	8.6	8.6	8.6	8.6	9.3	10.8	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)