

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: STREETWORKS

Report Number: P299713

Luminaire Tested: **GAA-AF-04-LED-U-SL2-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299713
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: STREETWORKS
Catalog Number: GAA-AF-04-LED-U-SL2-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K CCT 600mA 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: 10340.1 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 129
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: 28.75 FT

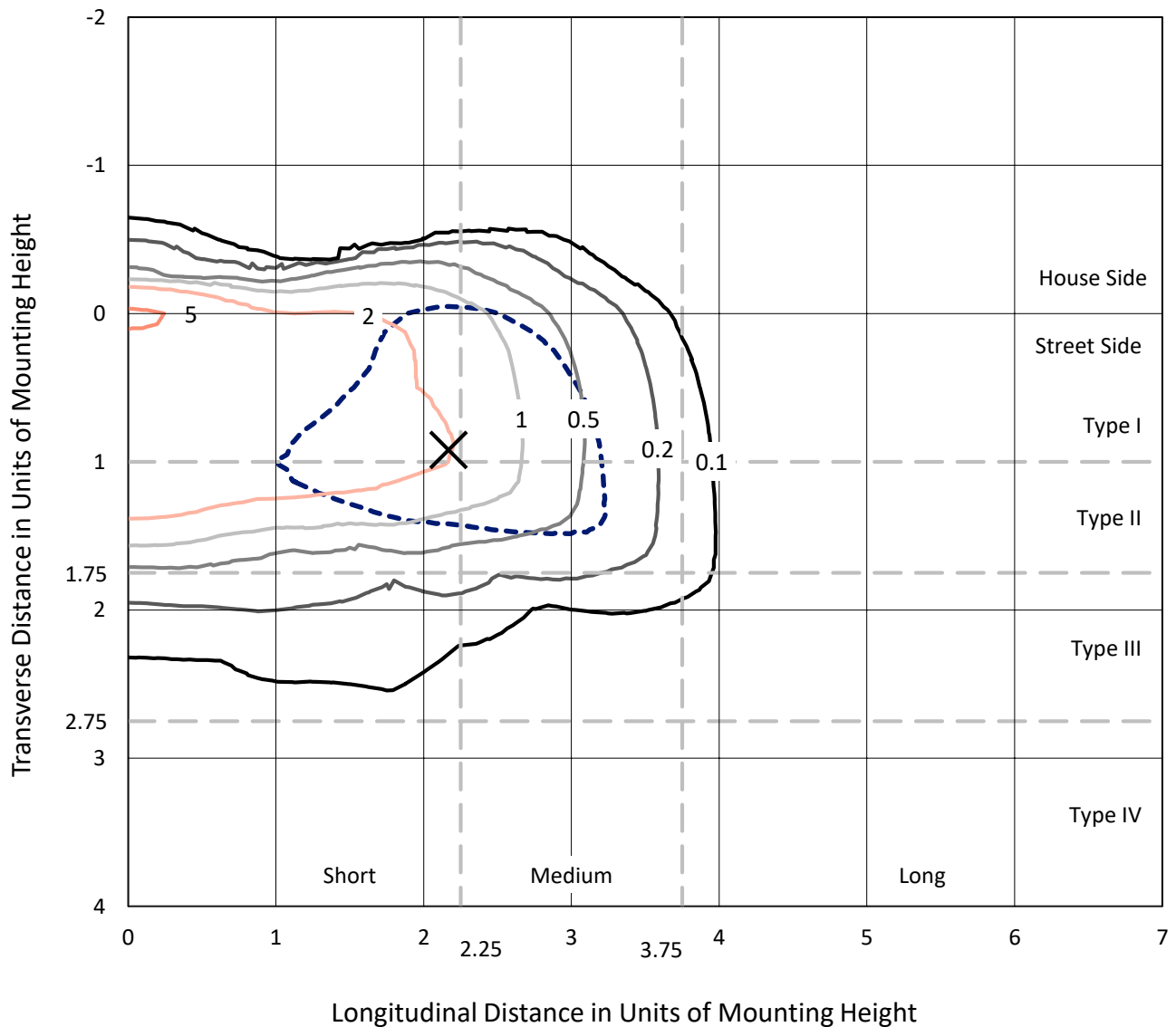


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

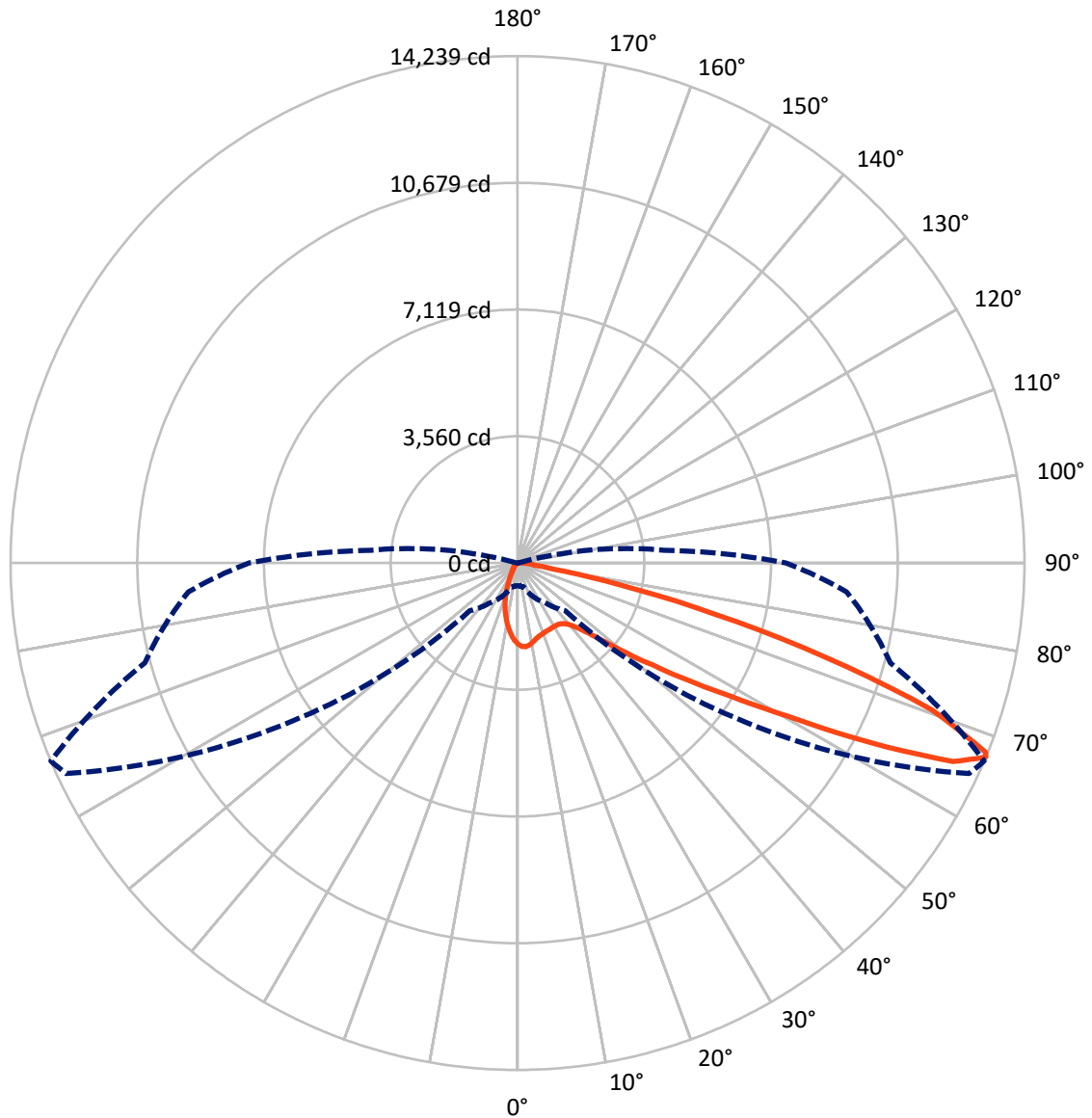


Based on 20 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - Semi-Cutoff

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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	1073.6	0.0	1073.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	9266.5	0.0	9266.5
	% Fixture	89.6	0.0	89.6
Total	Lumens	10340.1	0.0	10340.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.6	1.8
10°-20°	394.9	3.8
20°-30°	574.2	5.6
30°-40°	895.7	8.7
40°-50°	1586.8	15.3
50°-60°	2510.9	24.3
60°-70°	2875.9	27.8
70°-80°	1192.9	11.5
80°-90°	123.2	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°	10340.1	100.0
0°-180°	10340.1	100.0

Coefficient of Utilization



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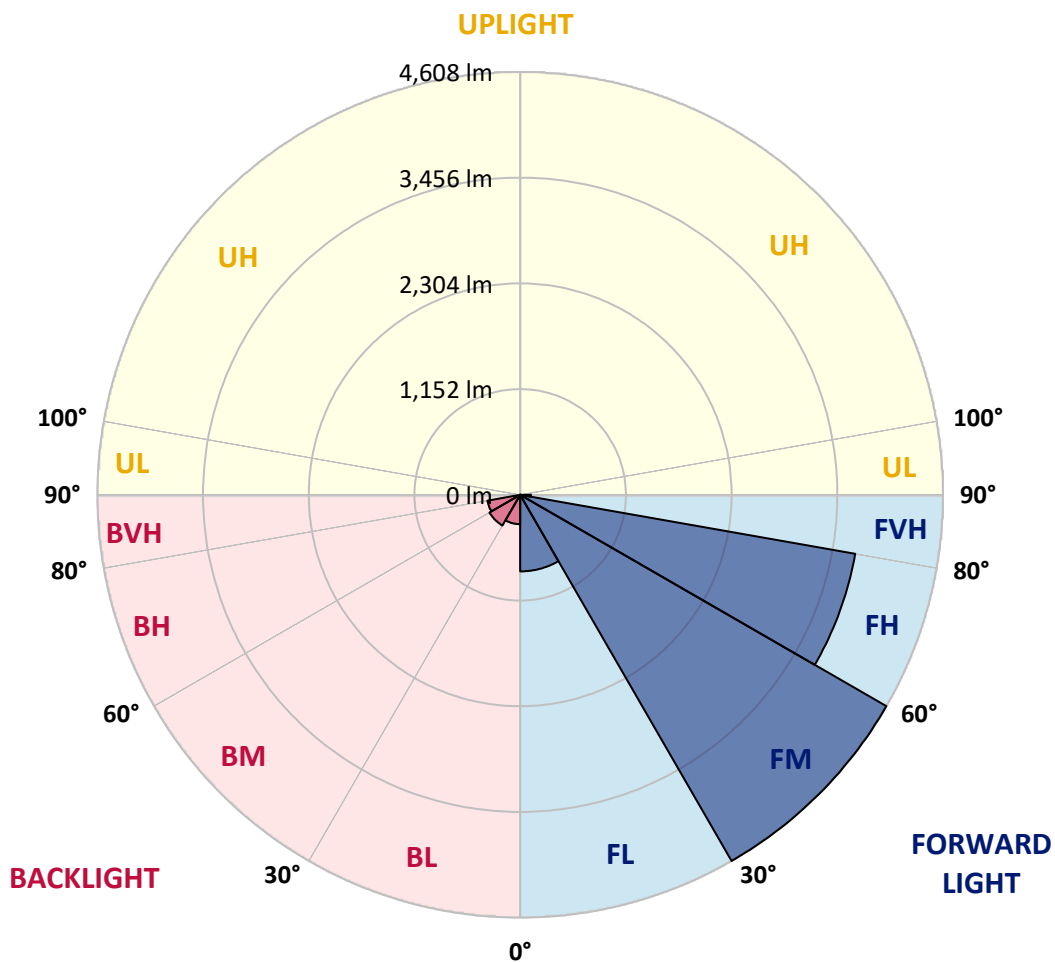
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	834.3	8.1			
FM (30°-60°)	4607.6	44.6			
FH (60°-80°)	3706.9	35.9			G2/5000
FVH (80°-90°)	117.7	1.1			G2/225
BL (0°-30°)	320.4	3.1	B1/500		
BM (30°-60°)	385.8	3.7	B1/1000		
BH (60°-80°)	361.8	3.5	B1/500		G1/500
BVH (80°-90°)	5.5	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°	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4
2.5°	2357.6	2362.4	2361.8	2365.4	2373.9	2374.5	2366.0	2349.7	2346.1	2325.0	2288.2
5°	2174.2	2188.1	2196.5	2230.9	2269.5	2316.0	2350.9	2363.6	2361.8	2346.7	2291.2
7.5°	1964.9	1978.8	1988.5	2028.9	2080.1	2159.7	2250.8	2325.6	2332.2	2348.5	2288.8
10°	1825.6	1828.0	1841.3	1879.9	1933.6	2015.0	2123.6	2254.4	2274.3	2334.0	2282.8
12.5°	1711.0	1712.8	1730.3	1771.9	1829.2	1911.3	2025.3	2176.6	2207.4	2316.0	2281.6
15°	1629.6	1636.2	1651.9	1695.3	1756.3	1837.7	1954.7	2119.3	2156.1	2309.3	2292.4
17.5°	1602.5	1609.7	1614.5	1645.9	1701.4	1781.0	1901.0	2081.9	2123.6	2312.9	2313.5
20°	1630.8	1636.2	1625.4	1633.2	1667.6	1738.8	1855.8	2050.0	2099.4	2317.2	2340.7
22.5°	1736.4	1738.8	1709.2	1674.8	1668.8	1708.0	1820.2	2024.6	2077.7	2328.6	2372.6
25°	1917.3	1913.1	1864.8	1790.6	1720.7	1702.6	1799.1	2009.0	2066.9	2340.7	2405.8
27.5°	2135.6	2141.7	2075.3	1967.4	1834.1	1738.8	1796.1	2002.3	2062.0	2349.1	2434.8
30°	2401.0	2409.4	2333.4	2197.7	2006.6	1828.0	1823.8	2001.1	2059.0	2343.7	2437.2
32.5°	2671.8	2682.0	2622.3	2482.4	2236.9	1977.6	1886.5	2014.4	2065.1	2325.0	2423.3
35°	2955.3	2969.7	2929.9	2809.9	2549.4	2193.5	1996.9	2054.8	2093.4	2323.2	2409.4
37.5°	3346.7	3359.9	3285.2	3157.9	2927.5	2483.0	2174.2	2130.8	2160.3	2352.1	2413.1
40°	3931.1	3929.3	3736.3	3541.5	3343.1	2850.9	2423.3	2268.3	2283.4	2439.6	2457.7
42.5°	4568.0	4565.0	4279.7	3983.6	3804.4	3303.9	2750.8	2505.9	2495.7	2600.6	2573.5
45°	5058.9	5058.3	4825.5	4492.0	4359.9	3823.7	3174.2	2836.4	2820.8	2862.4	2787.0
47.5°	5268.2	5271.8	5154.8	4920.2	4975.7	4527.0	3707.9	3315.3	3291.8	3274.9	3160.3
50°	5105.3	5112.6	5122.2	5076.4	5427.4	5472.0	4423.8	3990.2	3978.7	3903.3	3724.2
52.5°	4573.4	4610.2	4723.6	4868.9	5584.2	6379.1	5546.2	4828.5	4767.0	4686.8	4489.6
55°	3677.2	3717.6	3932.9	4285.7	5350.8	6975.0	7119.1	5909.3	5806.8	5567.3	5282.7
57.5°	2433.6	2496.3	2808.7	3257.4	4672.9	7070.9	8688.4	7409.2	7052.2	6396.6	6075.8
60°	1340.7	1401.0	1740.0	2146.5	3375.0	6596.8	9743.9	9362.1	8731.3	7323.6	7038.9
62.5°	825.7	858.2	1108.5	1486.7	2024.0	5206.7	9962.2	11816.2	11085.8	8517.2	8202.3
65°	657.4	671.3	793.7	1215.3	1451.1	3097.0	9257.2	13687.0	13443.4	9962.2	9243.9
67°	638.1	643.5	701.4	1043.4	1367.9	1898.6	7755.4	13991.6	14238.9	10836.7	9276.5
67.5°	642.3	648.3	703.2	995.7	1365.4	1744.8	7238.0	13871.6	14184.0	10906.1	9132.3
70°	619.4	638.1	805.2	995.1	1298.5	1449.9	4334.6	12018.8	12343.9	10133.5	7748.8
72.5°	219.5	220.7	348.0	805.2	1411.9	1465.6	2176.6	8810.9	9051.5	7751.8	5586.6
75°	130.3	111.0	115.8	229.2	1349.2	1423.3	1255.7	5630.1	5719.9	4441.9	2829.2
77.5°	89.9	78.4	80.8	101.3	513.9	1403.4	997.5	2936.0	2840.1	1557.8	602.5
80°	51.3	45.2	48.2	88.7	187.0	1309.4	940.9	1190.5	1015.0	264.2	166.5
82.5°	27.1	22.9	27.7	73.0	130.3	816.0	942.7	575.4	456.0	89.3	113.4
85°	9.6	7.8	13.3	50.1	86.8	250.3	873.9	483.7	380.0	43.4	86.2
87.5°	1.8	1.8	5.4	20.5	35.0	76.6	516.9	287.1	192.4	25.9	59.1
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°	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4	2280.4
2.5°	2273.1	2247.2	2212.2	2169.4	2118.7	2074.1	2040.9	2006.6	1999.3	1987.3	1985.4
5°	2258.1	2213.4	2126.6	2027.1	1920.9	1825.0	1747.2	1677.9	1647.1	1620.6	1617.5
7.5°	2235.7	2168.8	2021.0	1860.6	1694.7	1544.0	1416.1	1325.6	1242.4	1202.6	1196.6
10°	2209.8	2113.9	1902.2	1679.7	1450.5	1237.6	1047.6	888.4	791.9	734.6	727.4
12.5°	2185.7	2060.2	1781.0	1492.1	1187.5	902.9	658.6	506.6	405.3	364.3	359.5
15°	2174.2	2016.8	1667.6	1300.3	912.5	574.8	360.1	278.6	245.5	235.8	235.2
17.5°	2173.0	1980.0	1556.6	1101.9	639.3	334.1	234.6	214.1	207.5	205.1	205.1
20°	2172.4	1945.0	1445.7	896.2	405.9	222.5	195.4	190.6	185.8	182.7	182.7
22.5°	2179.0	1913.7	1329.9	686.3	255.7	180.3	171.9	167.1	161.0	156.8	156.2
25°	2185.7	1889.6	1211.7	488.5	185.2	156.8	148.4	141.7	133.3	127.9	127.3
27.5°	2186.9	1859.4	1085.0	326.9	155.0	136.9	126.1	115.8	106.1	100.7	100.1
30°	2168.8	1808.7	944.5	220.7	136.9	118.8	104.3	93.5	84.4	80.2	80.2
32.5°	2133.2	1746.0	790.1	166.5	121.8	101.9	86.2	76.0	70.0	68.2	67.5
35°	2101.2	1678.5	631.5	141.1	109.2	86.2	70.6	63.9	60.3	59.7	59.1
37.5°	2082.5	1624.2	482.5	127.9	97.1	72.4	59.7	54.9	53.1	51.9	52.5
40°	2097.0	1578.9	356.4	117.0	85.0	60.3	50.7	48.2	46.4	45.8	45.8
42.5°	2160.3	1571.1	264.8	107.4	73.6	50.1	44.0	42.2	41.0	40.4	41.0
45°	2326.8	1619.4	205.7	98.3	62.1	42.2	37.4	36.8	36.2	36.2	36.2
47.5°	2577.1	1718.9	171.3	88.1	51.9	36.2	32.6	32.0	31.4	32.0	32.0
50°	3001.1	1901.0	153.2	77.8	42.8	30.8	27.7	27.7	27.7	27.7	28.3
52.5°	3645.8	2259.3	141.1	67.5	35.0	25.9	23.5	23.5	24.1	24.1	24.7
55°	4364.1	2734.5	130.3	57.3	29.6	21.7	19.3	19.9	20.5	21.1	21.1
57.5°	5143.3	3261.0	121.2	47.0	25.3	17.5	16.3	16.9	17.5	18.7	18.7
60°	6083.6	3831.0	108.0	36.8	21.1	13.9	12.7	13.9	15.7	16.9	17.5
62.5°	7116.1	4382.2	91.1	28.9	17.5	10.9	10.3	12.7	15.1	16.3	16.9
65°	7821.8	4555.3	70.0	23.5	13.3	7.8	8.4	11.5	14.5	16.3	16.3
67°	7535.9	4130.1	57.3	19.9	10.9	6.0	7.8	11.5	14.5	15.7	16.3
67.5°	7337.5	3963.7	54.9	19.3	10.3	6.0	7.8	11.5	14.5	16.3	16.3
70°	5970.2	2977.6	45.8	14.5	8.4	5.4	6.6	10.9	13.9	15.7	15.7
72.5°	4148.2	1835.9	41.0	10.3	7.2	4.8	6.0	10.3	13.3	15.1	15.7
75°	1972.2	664.6	35.0	7.8	6.6	4.2	5.4	10.3	13.3	15.1	15.1
77.5°	402.3	154.4	28.3	6.6	5.4	4.2	4.8	9.6	12.7	14.5	14.5
80°	132.1	59.7	21.1	6.0	5.4	4.2	4.8	9.0	12.7	13.9	14.5
82.5°	95.3	30.2	13.9	6.0	5.4	4.2	4.2	9.0	12.1	13.9	13.9
85°	73.0	21.1	9.0	6.0	5.4	4.2	4.2	8.4	11.5	13.3	13.3
87.5°	48.2	8.4	7.2	6.0	5.4	4.2	4.2	8.4	10.9	12.7	13.3
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)