

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: P258073

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258073
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15536.6 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

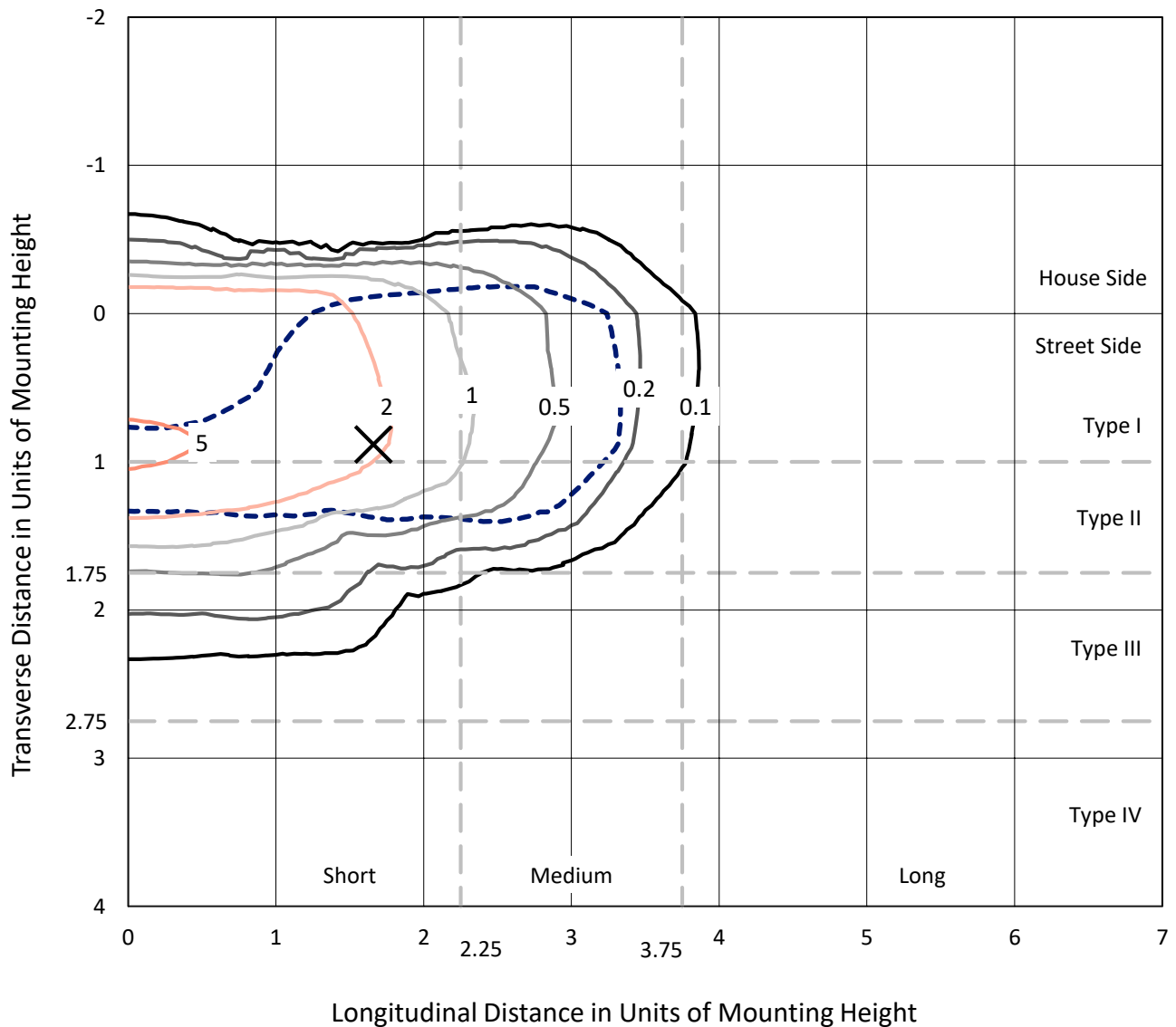
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

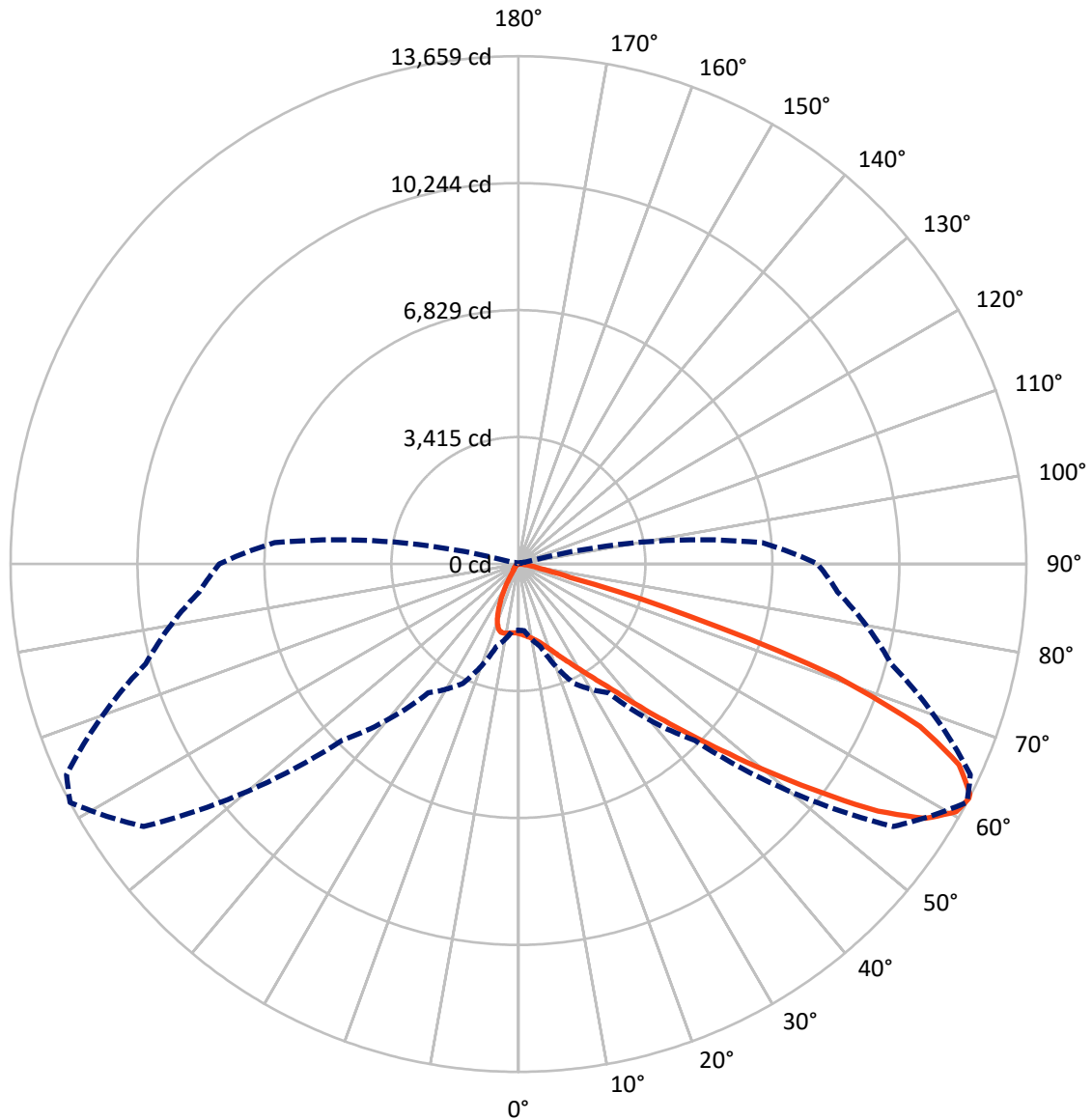
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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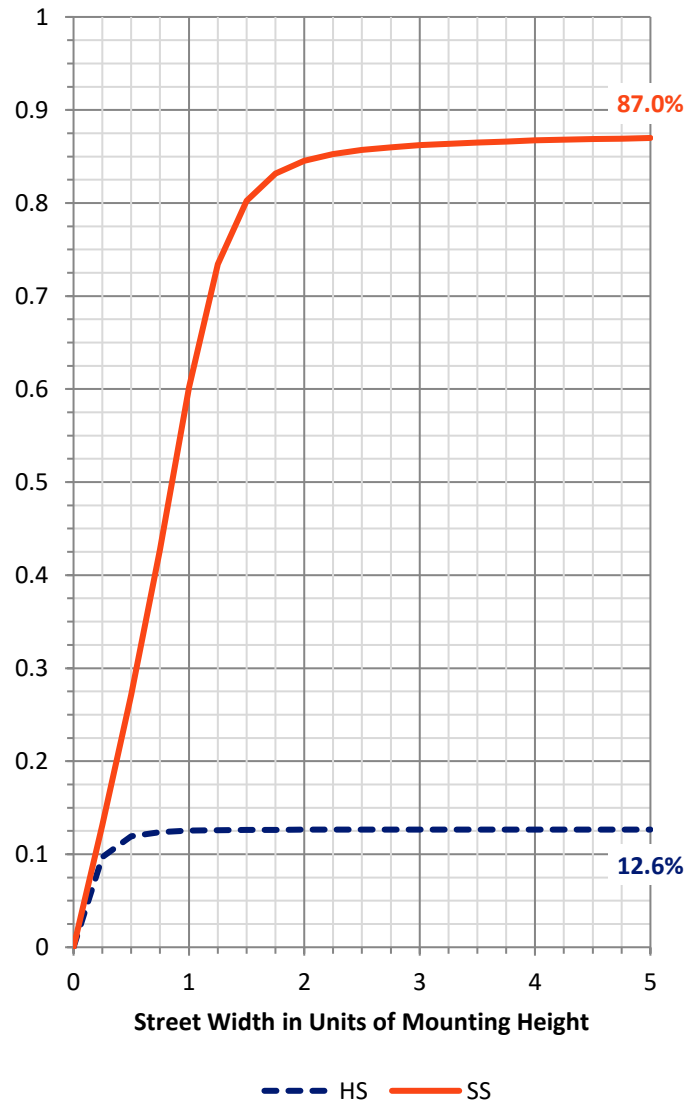
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1986.6	0.0	1986.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	13550.0	0.0	13550.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	15536.6	0.0	15536.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.1	1.2
10°-20°	503.0	3.2
20°-30°	844.7	5.4
30°-40°	1619.3	10.4
40°-50°	3307.3	21.3
50°-60°	4376.7	28.2
60°-70°	3400.0	21.9
70°-80°	1227.2	7.9
80°-90°	78.2	0.5
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°	15536.6	100.0
0°-180°	15536.6	100.0



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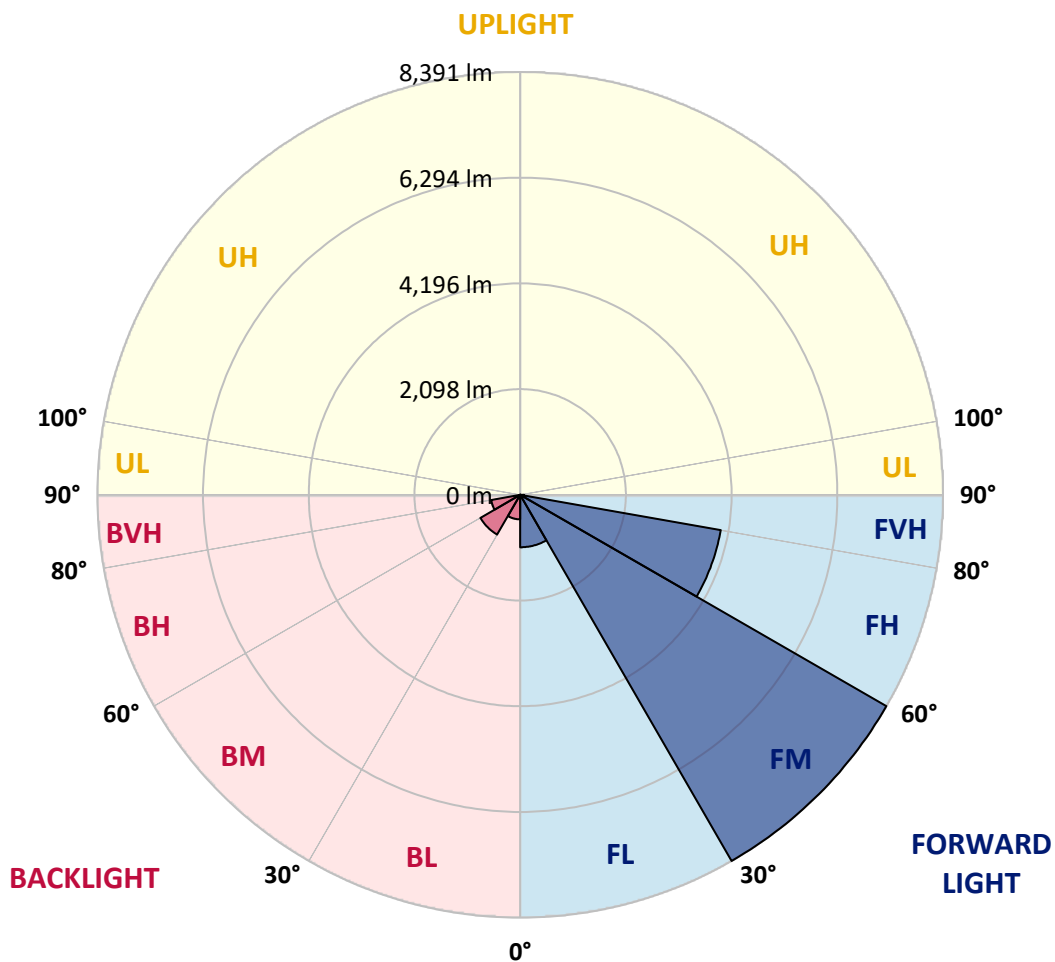
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1041.6	6.7			
FM	(30°-60°)	8391.4	54.0			
FH	(60°-80°)	4042.3	26.0			G2/5000
FVH	(80°-90°)	74.8	0.5			G1/100
BL	(0°-30°)	486.2	3.1	B1/500		
BM	(30°-60°)	912.0	5.9	B1/1000		
BH	(60°-80°)	585.0	3.8	B2/1000		G2/1000
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: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6
2.5°	1921.2	1917.4	1913.6	1909.7	1909.7	1906.0	1902.2	1894.5	1886.8	1879.3	1875.4
5°	1955.6	1951.8	1948.0	1951.8	1948.0	1948.0	1944.1	1936.5	1928.9	1917.4	1906.0
7.5°	1982.4	1978.5	1974.7	1978.5	1982.4	1986.2	1989.9	1982.4	1978.5	1963.2	1951.8
10°	2016.7	2012.9	2009.1	2016.7	2016.7	2035.8	2039.7	2035.8	2032.0	2020.5	2001.4
12.5°	2066.4	2070.2	2070.2	2077.8	2085.5	2108.4	2116.1	2104.6	2104.6	2089.3	2066.4
15°	2158.0	2158.0	2158.0	2165.7	2169.5	2200.1	2207.7	2196.3	2203.8	2177.1	2154.2
17.5°	2245.9	2249.7	2257.3	2272.6	2272.6	2299.4	2314.6	2314.6	2330.0	2295.6	2265.0
20°	2333.8	2337.5	2349.0	2383.4	2383.4	2417.7	2444.5	2456.0	2471.2	2436.9	2383.4
22.5°	2429.2	2429.2	2448.3	2501.8	2490.4	2559.1	2608.7	2627.9	2643.1	2597.3	2513.3
25°	2574.4	2559.1	2574.4	2624.1	2616.4	2711.8	2803.6	2822.6	2841.8	2788.3	2662.2
27.5°	2849.4	2826.5	2773.0	2776.8	2776.8	2887.6	3017.5	3044.2	3055.7	3009.8	2853.2
30°	3399.4	3399.4	3200.8	3067.1	2979.2	3078.6	3261.9	3307.7	3323.1	3254.3	3048.0
32.5°	4358.1	4358.1	3991.5	3651.5	3319.2	3319.2	3529.3	3613.3	3628.6	3548.4	3307.7
35°	5580.4	5572.7	5022.7	4556.7	3907.4	3663.0	3842.5	3983.8	4029.6	3922.7	3643.9
37.5°	6879.0	6829.3	6237.3	5702.6	4812.7	4213.0	4266.4	4453.6	4495.7	4407.8	4079.3
40°	7933.2	7875.9	7398.5	6951.6	5981.4	5091.4	4877.5	5049.5	5099.1	4976.9	4598.8
42.5°	8888.1	8746.7	8418.3	8097.5	7325.9	6611.6	5691.2	5759.9	5813.3	5683.5	5183.2
45°	9579.4	9361.7	9193.7	9094.3	8685.7	8280.8	6745.3	6607.9	6627.0	6466.5	5821.0
47.5°	9598.6	9445.7	9461.1	9720.8	9888.9	9873.5	8116.6	7627.6	7555.1	7287.7	6500.9
50°	8681.9	8769.7	9048.5	9789.5	10698.5	11248.6	9747.5	8834.6	8616.9	8135.6	7176.9
52.5°	7154.0	7291.5	7814.8	9063.9	10817.0	12153.9	11439.6	10213.4	9823.9	8976.0	7696.4
55°	5603.3	5610.9	6160.9	7432.9	10026.4	12318.1	12791.7	11729.9	11134.0	9613.8	8040.2
57.5°	3854.0	4064.0	4763.0	5618.6	8242.6	11500.7	13299.7	12906.3	12138.5	10007.2	8280.8
60°	2524.7	2536.2	3349.8	4339.1	5610.9	9358.0	12990.4	13528.8	12952.1	10240.2	8445.1
62°	1779.9	1799.0	2303.2	3544.5	4228.3	6707.2	12306.6	13658.7	13410.5	10377.7	8616.9
62.5°	1650.0	1665.4	2089.3	3346.0	3972.3	6015.8	12062.1	13628.2	13479.2	10423.6	8678.0
65°	1210.8	1210.8	1367.4	2299.4	2910.5	3250.4	10221.1	13020.8	13387.6	10790.3	8907.2
67.5°	935.8	943.5	996.9	1417.1	2196.3	1970.9	6523.8	11653.5	12432.6	11332.7	9037.1
70°	805.9	802.1	840.3	939.6	1585.2	1310.1	2872.3	9094.3	10412.1	11195.2	8918.7
72.5°	595.9	599.7	687.5	825.0	1103.9	851.8	1298.6	4827.9	6753.0	8762.1	7643.0
75°	382.0	385.8	485.1	649.4	794.4	557.6	748.6	1440.0	2765.3	4858.5	4675.1
77.5°	255.9	263.5	317.0	454.5	695.2	347.6	469.8	603.5	832.7	1822.0	1676.8
80°	171.9	171.9	202.4	305.6	439.3	290.3	252.1	401.1	431.6	565.3	282.6
82.5°	114.6	114.6	133.7	202.4	286.4	259.7	152.8	217.7	252.1	282.6	99.3
85°	68.7	68.7	91.7	126.0	187.2	145.2	99.3	122.2	129.9	179.5	53.5
87.5°	42.0	38.2	61.1	87.9	99.3	87.9	65.0	65.0	68.7	99.3	26.7
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°	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6	1871.6
2.5°	1867.8	1863.9	1860.1	1852.5	1841.0	1833.4	1825.8	1818.1	1810.5	1810.5	1822.0
5°	1902.2	1890.7	1875.4	1860.1	1837.2	1822.0	1810.5	1795.2	1787.5	1787.5	1791.4
7.5°	1944.1	1932.7	1906.0	1879.3	1844.9	1818.1	1791.4	1757.0	1730.2	1718.8	1730.2
10°	1989.9	1974.7	1936.5	1894.5	1856.3	1787.5	1699.7	1592.7	1501.1	1459.0	1478.2
12.5°	2047.3	2028.2	1982.4	1925.1	1837.2	1669.1	1451.5	1203.2	1046.6	974.0	989.3
15°	2131.3	2104.6	2039.7	1951.8	1757.0	1394.2	1038.9	752.5	607.3	546.2	553.8
17.5°	2230.6	2196.3	2108.4	1944.1	1550.7	1004.5	618.8	439.3	378.2	362.8	362.8
20°	2337.5	2291.7	2177.1	1886.8	1237.6	630.2	385.8	336.1	313.2	301.8	301.8
22.5°	2448.3	2387.3	2234.4	1753.1	882.3	393.4	317.0	282.6	255.9	244.5	244.5
25°	2582.0	2501.8	2291.7	1520.2	561.5	317.0	271.2	236.8	210.1	194.8	198.7
27.5°	2738.6	2635.5	2341.4	1229.9	362.8	275.0	225.4	191.0	168.1	160.4	160.4
30°	2902.8	2780.7	2352.9	920.6	294.1	236.8	187.2	156.6	141.4	133.7	133.7
32.5°	3128.2	2967.8	2318.5	611.1	248.3	198.7	156.6	129.9	118.4	114.6	114.6
35°	3426.2	3212.3	2238.2	378.2	210.1	164.3	129.9	114.6	103.1	99.3	99.3
37.5°	3804.3	3552.2	2096.9	259.7	179.5	133.7	110.8	99.3	91.7	87.9	87.9
40°	4308.5	3964.7	1913.6	225.4	152.8	114.6	95.4	87.9	80.2	80.2	80.2
42.5°	4843.2	4465.1	1676.8	198.7	129.9	99.3	84.0	76.4	72.5	68.7	68.7
45°	5427.6	4976.9	1382.7	175.7	110.8	87.9	76.4	65.0	61.1	61.1	61.1
47.5°	6008.2	5504.0	1061.8	152.8	95.4	76.4	65.0	57.3	53.5	49.6	49.6
50°	6604.0	5981.4	779.2	133.7	84.0	68.7	57.3	49.6	42.0	38.2	38.2
52.5°	7035.7	6267.9	569.1	114.6	72.5	57.3	45.8	38.2	30.6	26.7	26.7
55°	7352.7	6443.6	416.3	95.4	65.0	49.6	38.2	30.6	22.9	22.9	19.1
57.5°	7600.9	6527.7	313.2	84.0	57.3	42.0	30.6	22.9	19.1	15.2	15.2
60°	7791.9	6531.4	233.0	68.7	49.6	34.4	22.9	15.2	11.5	11.5	11.5
62°	8044.0	6581.1	191.0	57.3	45.8	30.6	19.1	11.5	7.7	3.8	3.8
62.5°	8116.6	6600.2	183.3	57.3	42.0	26.7	15.2	11.5	7.7	3.8	3.8
65°	8452.6	6634.6	141.4	45.8	34.4	22.9	11.5	7.7	0.0	0.0	0.0
67.5°	8758.2	6581.1	103.1	34.4	26.7	15.2	11.5	3.8	0.0	0.0	0.0
70°	8727.7	6214.4	72.5	22.9	19.1	11.5	7.7	0.0	0.0	0.0	0.0
72.5°	7192.3	4652.2	49.6	19.1	11.5	7.7	3.8	0.0	0.0	0.0	0.0
75°	4342.8	2035.8	34.4	11.5	11.5	7.7	3.8	0.0	0.0	0.0	0.0
77.5°	1424.7	737.1	22.9	7.7	7.7	3.8	3.8	0.0	0.0	0.0	0.0
80°	233.0	122.2	11.5	7.7	7.7	3.8	3.8	0.0	0.0	0.0	0.0
82.5°	72.5	30.6	7.7	7.7	3.8	3.8	0.0	0.0	0.0	0.0	0.0
85°	26.7	11.5	7.7	7.7	3.8	3.8	0.0	0.0	0.0	0.0	0.0
87.5°	11.5	7.7	7.7	7.7	3.8	3.8	0.0	0.0	0.0	0.0	0.0
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)