

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: P258079

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258079
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-AF72-230-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 980mA 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: 18874.5 lumens
Efficiency: N/A
Efficacy: 82.4 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

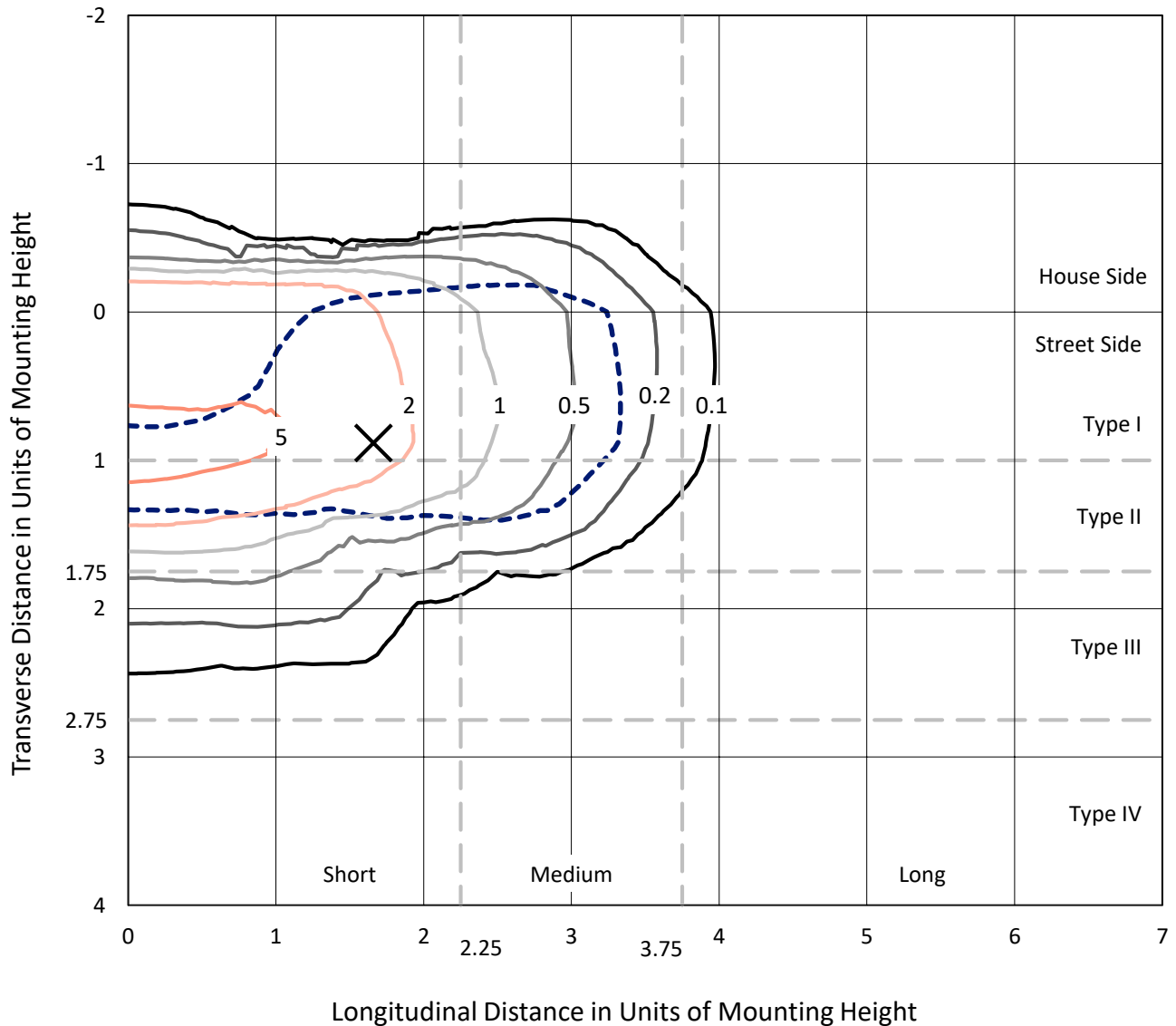
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

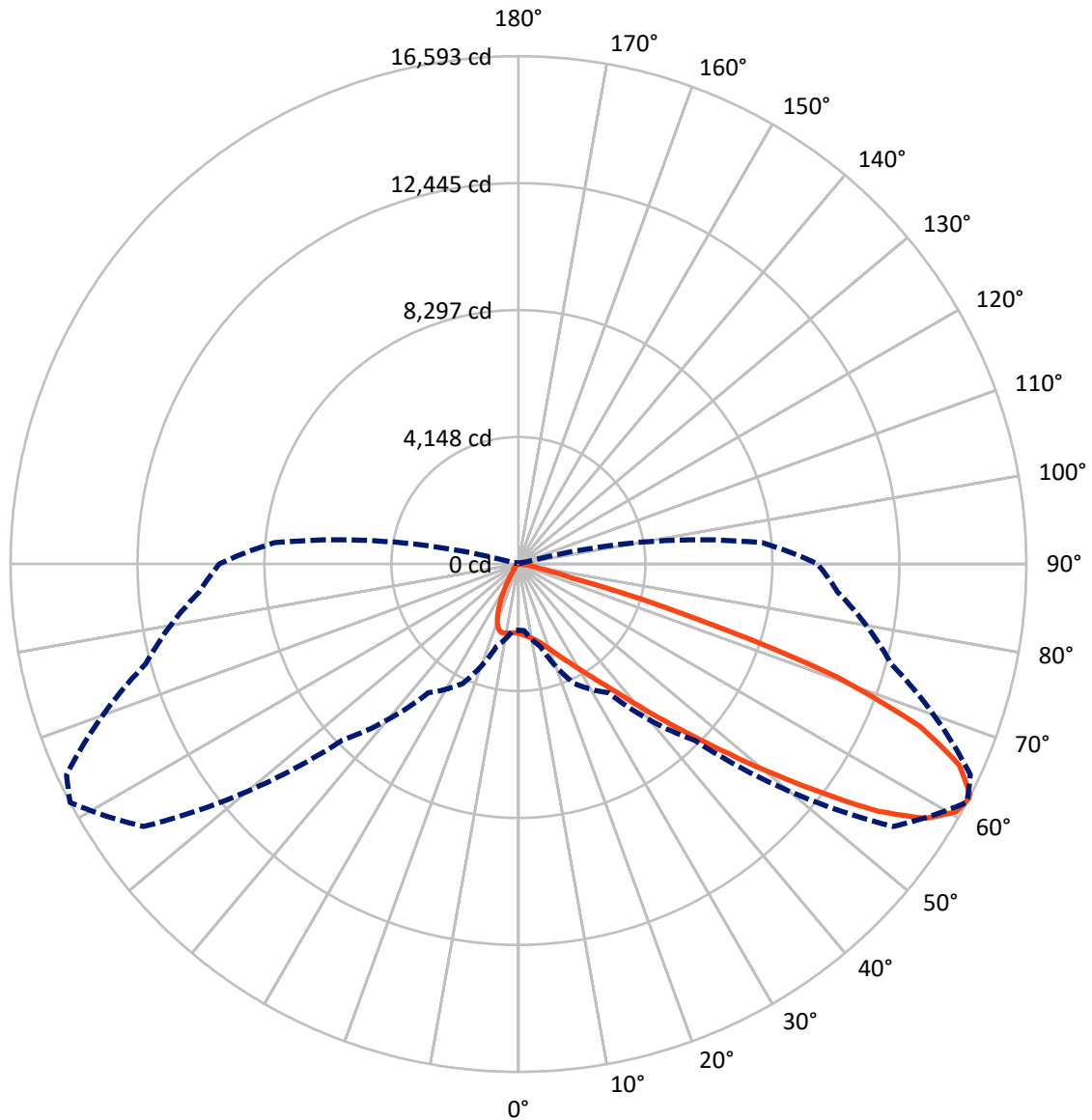
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 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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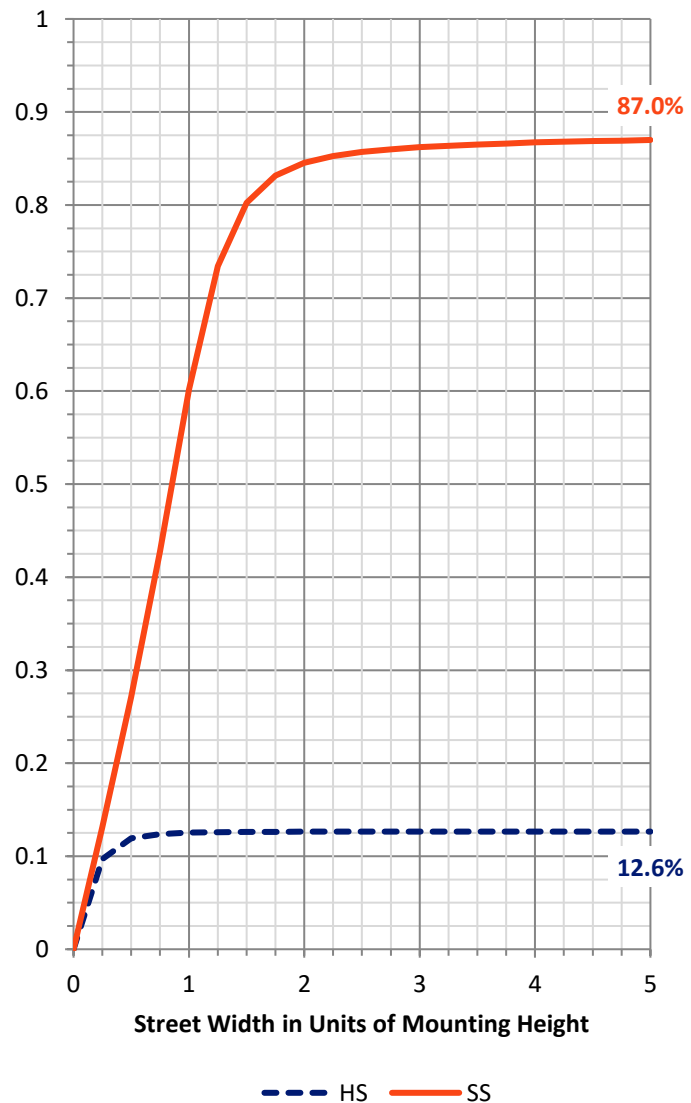
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2413.3	0.0	2413.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	16461.1	0.0	16461.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	18874.5	0.0	18874.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.8	1.2
10°-20°	611.0	3.2
20°-30°	1026.2	5.4
30°-40°	1967.1	10.4
40°-50°	4017.9	21.3
50°-60°	5317.0	28.2
60°-70°	4130.5	21.9
70°-80°	1490.9	7.9
80°-90°	95.0	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°	18874.5	100.0
0°-180°	18874.5	100.0



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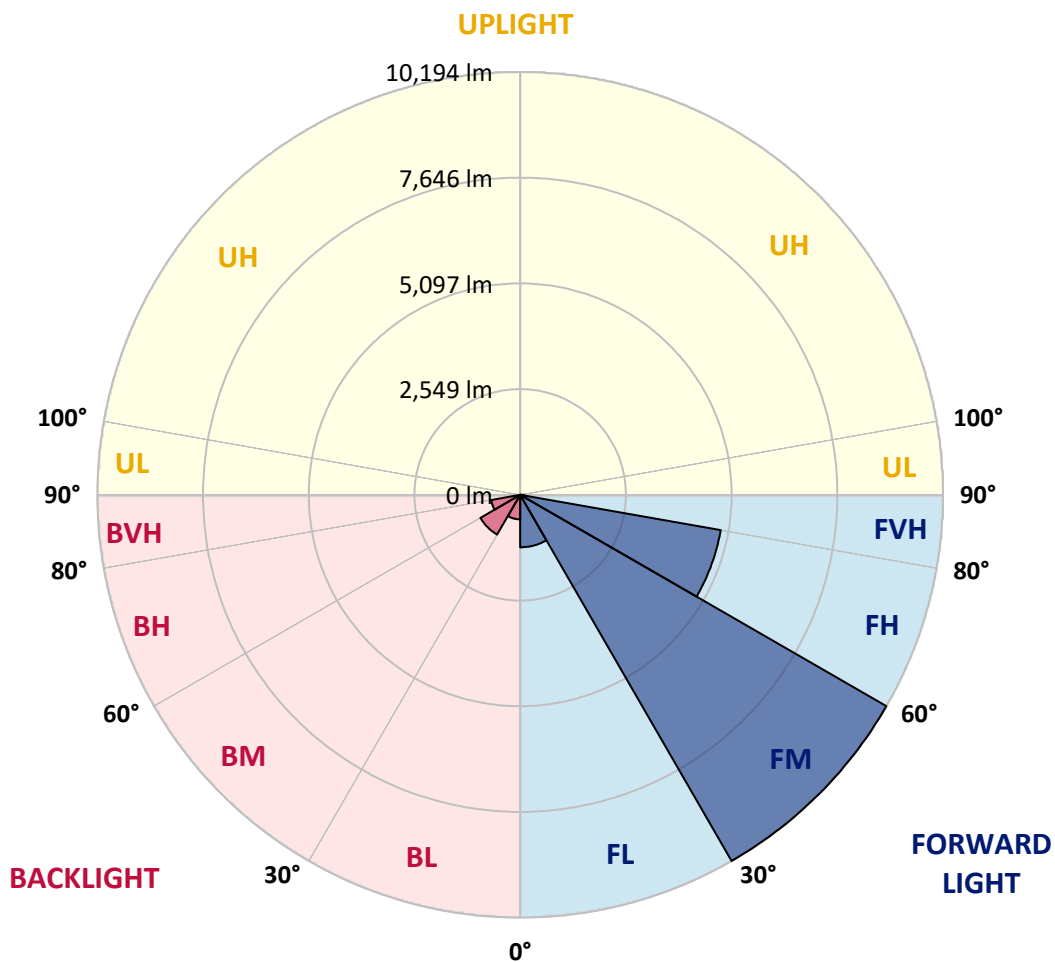
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1265.4	6.7			
FM (30°-60°)	10194.2	54.0			
FH (60°-80°)	4910.7	26.0			G2/5000
FVH (80°-90°)	90.9	0.5			G1/100
BL (0°-30°)	590.6	3.1	B2/1000		
BM (30°-60°)	1107.9	5.9	B2/2500		
BH (60°-80°)	710.6	3.8	B2/1000		G2/1000
BVH (80°-90°)	4.1	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°	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7
2.5°	2334.0	2329.4	2324.8	2320.1	2320.1	2315.4	2310.8	2301.5	2292.2	2282.9	2278.3
5°	2375.8	2371.1	2366.5	2371.1	2366.5	2366.5	2361.8	2352.6	2343.3	2329.4	2315.4
7.5°	2408.2	2403.6	2398.9	2403.6	2408.2	2412.8	2417.5	2408.2	2403.6	2385.0	2371.1
10°	2450.0	2445.4	2440.8	2450.0	2450.0	2473.2	2477.8	2473.2	2468.6	2454.7	2431.5
12.5°	2510.3	2514.9	2514.9	2524.2	2533.5	2561.4	2570.7	2556.8	2556.8	2538.1	2510.3
15°	2621.7	2621.7	2621.7	2630.9	2635.6	2672.8	2682.0	2668.1	2677.4	2644.8	2617.0
17.5°	2728.4	2733.0	2742.3	2760.8	2760.8	2793.4	2811.9	2811.9	2830.5	2788.8	2751.6
20°	2835.1	2839.8	2853.7	2895.5	2895.5	2937.2	2969.7	2983.6	3002.2	2960.4	2895.5
22.5°	2951.1	2951.1	2974.3	3039.3	3025.4	3109.0	3169.2	3192.4	3210.9	3155.3	3053.2
25°	3127.5	3109.0	3127.5	3187.8	3178.5	3294.5	3405.9	3429.0	3452.3	3387.3	3234.2
27.5°	3461.6	3433.7	3368.8	3373.4	3373.4	3508.0	3665.7	3698.2	3712.1	3656.4	3466.2
30°	4129.8	4129.8	3888.4	3726.0	3619.3	3740.0	3962.7	4018.4	4037.0	3953.4	3702.9
32.5°	5294.4	5294.4	4849.0	4436.0	4032.3	4032.3	4287.5	4389.6	4408.1	4310.7	4018.4
35°	6779.3	6770.0	6101.8	5535.7	4746.9	4449.9	4668.0	4839.7	4895.3	4765.4	4426.7
37.5°	8356.9	8296.6	7577.4	6927.7	5846.6	5118.1	5183.1	5410.4	5461.4	5354.7	4955.7
40°	9637.6	9568.0	8988.0	8445.1	7266.5	6185.4	5925.4	6134.3	6194.6	6046.2	5586.7
42.5°	10797.7	10625.9	10226.8	9837.1	8899.8	8032.1	6913.8	6997.4	7062.4	6904.5	6296.7
45°	11637.5	11373.1	11168.9	11048.2	10551.7	10059.9	8194.6	8027.5	8050.6	7855.8	7071.6
47.5°	11660.7	11475.1	11493.7	11809.1	12013.3	11994.8	9860.3	9266.4	9178.2	8853.4	7897.6
50°	10547.0	10653.8	10992.5	11892.7	12997.1	13665.3	11841.7	10732.7	10468.2	9883.5	8718.8
52.5°	8691.0	8858.0	9493.8	11011.0	13140.9	14765.0	13897.3	12407.8	11934.5	10904.3	9349.9
55°	6807.1	6816.4	7484.5	9029.7	12180.4	14964.5	15539.9	14249.9	13526.1	11679.2	9767.5
57.5°	4681.9	4937.2	5786.3	6825.6	10013.5	13971.5	16157.0	15679.1	14746.4	12157.2	10059.9
60°	3067.1	3081.0	4069.4	5271.3	6816.4	11368.4	15781.2	16435.4	15734.7	12440.2	10259.4
62°	2162.3	2185.5	2798.0	4306.1	5136.6	8148.1	14950.5	16593.2	16291.6	12607.3	10468.2
62.5°	2004.6	2023.1	2538.1	4064.8	4825.8	7308.3	14653.6	16556.0	16375.1	12663.0	10542.4
65°	1470.9	1470.9	1661.2	2793.4	3535.8	3948.8	12417.1	15818.3	16263.7	13108.4	10820.9
67.5°	1136.8	1146.1	1211.1	1721.5	2668.1	2394.3	7925.4	14157.1	15103.7	13767.4	10978.6
70°	979.1	974.5	1020.8	1141.5	1925.7	1591.6	3489.4	11048.2	12649.1	13600.3	10834.8
72.5°	723.8	728.5	835.2	1002.3	1341.0	1034.7	1577.7	5865.2	8203.8	10644.5	9284.9
75°	464.0	468.6	589.3	788.8	965.2	677.5	909.5	1749.3	3359.5	5902.3	5679.5
77.5°	310.9	320.2	385.1	552.2	844.5	422.3	570.7	733.1	1011.6	2213.4	2037.0
80°	208.8	208.8	245.9	371.2	533.6	352.6	306.3	487.2	524.4	686.7	343.4
82.5°	139.2	139.2	162.4	245.9	348.0	315.6	185.6	264.5	306.3	343.4	120.6
85°	83.5	83.5	111.4	153.1	227.4	176.4	120.6	148.5	157.7	218.1	65.0
87.5°	51.0	46.4	74.3	106.7	120.6	106.7	78.9	78.9	83.5	120.6	32.5
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°	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7	2273.7
2.5°	2269.0	2264.4	2259.8	2250.5	2236.6	2227.3	2218.0	2208.8	2199.4	2199.4	2213.4
5°	2310.8	2296.8	2278.3	2259.8	2231.9	2213.4	2199.4	2180.8	2171.6	2171.6	2176.2
7.5°	2361.8	2347.9	2315.4	2282.9	2241.2	2208.8	2176.2	2134.5	2102.0	2088.0	2102.0
10°	2417.5	2398.9	2352.6	2301.5	2255.1	2171.6	2064.8	1934.9	1823.6	1772.6	1795.8
12.5°	2487.1	2463.9	2408.2	2338.7	2231.9	2027.8	1763.3	1461.7	1271.4	1183.2	1201.8
15°	2589.2	2556.8	2477.8	2371.1	2134.5	1693.7	1262.1	914.1	737.8	663.6	672.8
17.5°	2709.9	2668.1	2561.4	2361.8	1883.9	1220.4	751.7	533.6	459.4	440.8	440.8
20°	2839.8	2784.1	2644.8	2292.2	1503.4	765.6	468.6	408.4	380.5	366.5	366.5
22.5°	2974.3	2900.1	2714.5	2129.8	1071.8	477.9	385.1	343.4	310.9	297.0	297.0
25°	3136.8	3039.3	2784.1	1846.7	682.1	385.1	329.5	287.7	255.2	236.6	241.3
27.5°	3326.9	3201.7	2844.4	1494.1	440.8	334.1	273.7	232.0	204.2	194.9	194.9
30°	3526.5	3378.0	2858.3	1118.3	357.3	287.7	227.4	190.3	171.7	162.4	162.4
32.5°	3800.3	3605.4	2816.6	742.5	301.6	241.3	190.3	157.7	143.8	139.2	139.2
35°	4162.2	3902.4	2719.1	459.4	255.2	199.6	157.7	139.2	125.3	120.6	120.6
37.5°	4621.6	4315.3	2547.5	315.6	218.1	162.4	134.5	120.6	111.4	106.7	106.7
40°	5234.1	4816.5	2324.8	273.7	185.6	139.2	116.0	106.7	97.5	97.5	97.5
42.5°	5883.7	5424.3	2037.0	241.3	157.7	120.6	102.1	92.8	88.2	83.5	83.5
45°	6593.6	6046.2	1679.7	213.5	134.5	106.7	92.8	78.9	74.3	74.3	74.3
47.5°	7299.0	6686.4	1289.9	185.6	116.0	92.8	78.9	69.6	65.0	60.4	60.4
50°	8022.8	7266.5	946.6	162.4	102.1	83.5	69.6	60.4	51.0	46.4	46.4
52.5°	8547.2	7614.5	691.4	139.2	88.2	69.6	55.6	46.4	37.1	32.5	32.5
55°	8932.3	7827.9	505.7	116.0	78.9	60.4	46.4	37.1	27.8	27.8	23.2
57.5°	9233.9	7930.0	380.5	102.1	69.6	51.0	37.1	27.8	23.2	18.5	18.5
60°	9465.9	7934.6	283.1	83.5	60.4	41.7	27.8	18.5	13.9	13.9	13.9
62°	9772.1	7995.0	232.0	69.6	55.6	37.1	23.2	13.9	9.3	4.6	4.6
62.5°	9860.3	8018.2	222.7	69.6	51.0	32.5	18.5	13.9	9.3	4.6	4.6
65°	10268.7	8059.9	171.7	55.6	41.7	27.8	13.9	9.3	0.0	0.0	0.0
67.5°	10639.9	7995.0	125.3	41.7	32.5	18.5	13.9	4.6	0.0	0.0	0.0
70°	10602.8	7549.5	88.2	27.8	23.2	13.9	9.3	0.0	0.0	0.0	0.0
72.5°	8737.4	5651.7	60.4	23.2	13.9	9.3	4.6	0.0	0.0	0.0	0.0
75°	5275.9	2473.2	41.7	13.9	13.9	9.3	4.6	0.0	0.0	0.0	0.0
77.5°	1730.7	895.6	27.8	9.3	9.3	4.6	4.6	0.0	0.0	0.0	0.0
80°	283.1	148.5	13.9	9.3	9.3	4.6	4.6	0.0	0.0	0.0	0.0
82.5°	88.2	37.1	9.3	9.3	4.6	4.6	0.0	0.0	0.0	0.0	0.0
85°	32.5	13.9	9.3	9.3	4.6	4.6	0.0	0.0	0.0	0.0	0.0
87.5°	13.9	9.3	9.3	9.3	4.6	4.6	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)