

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: P236944

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-110-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11877.5 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

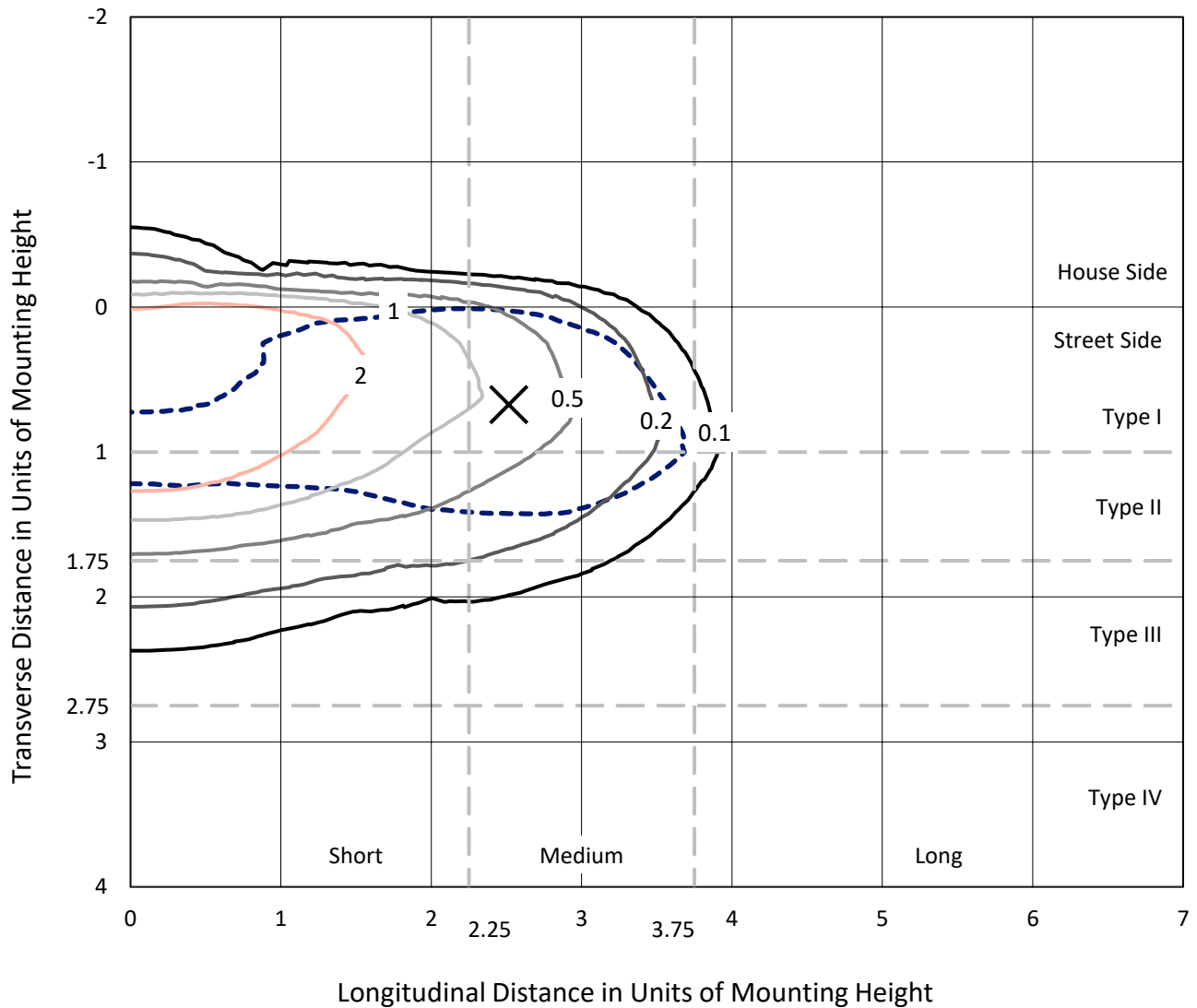
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

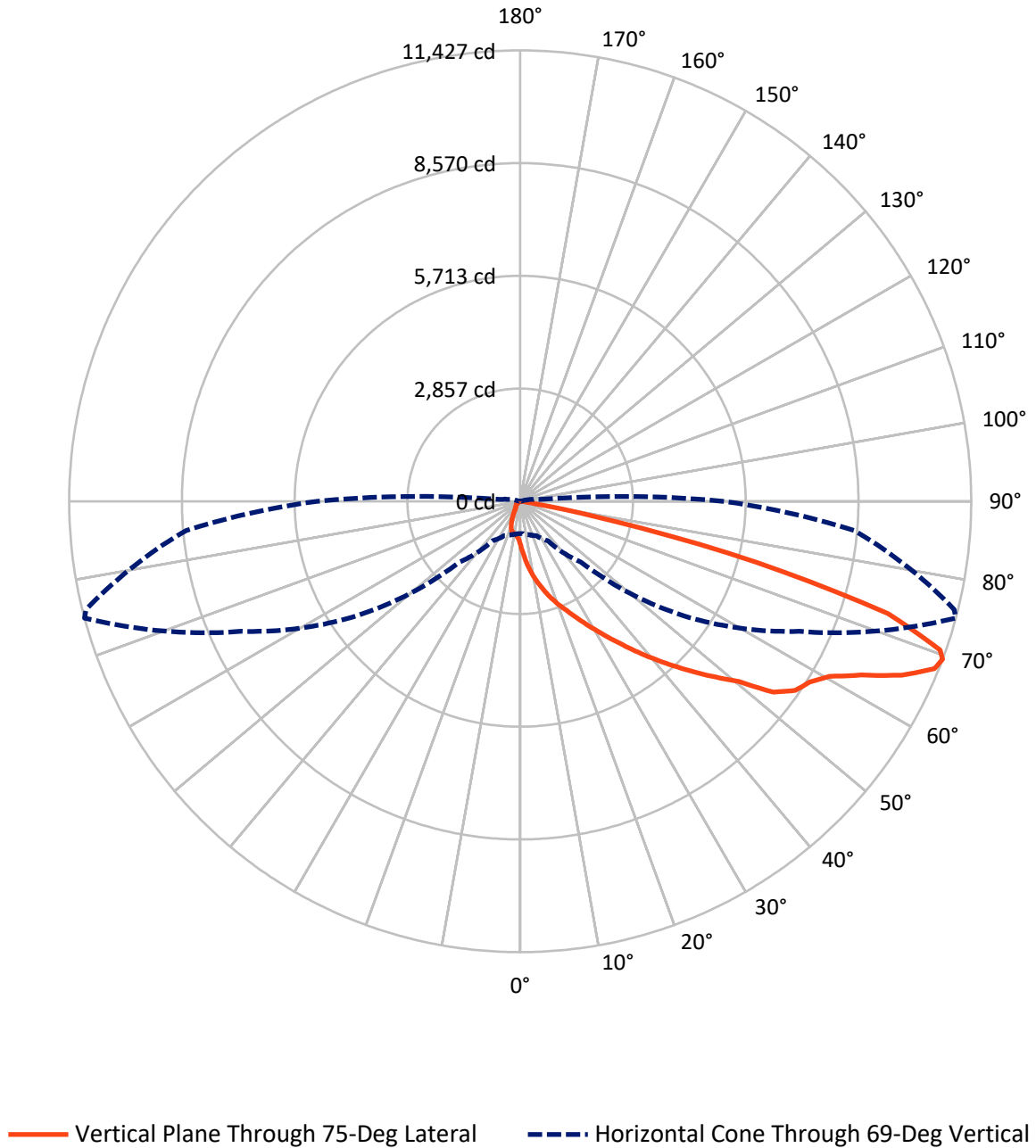
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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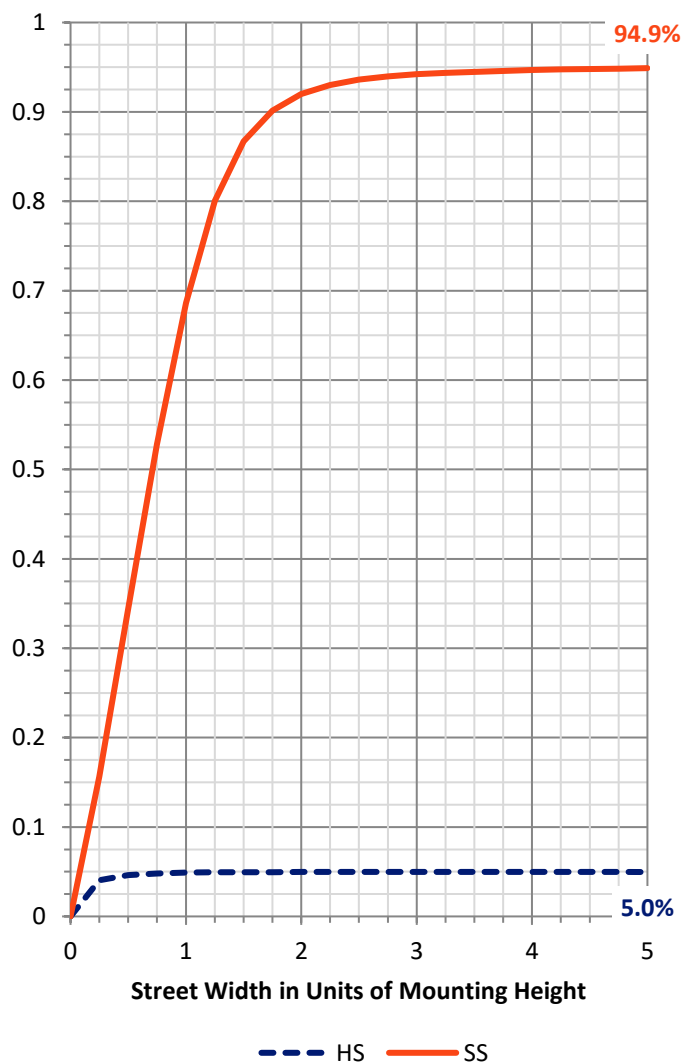
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	592.6	0.0	592.6
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	11285.0	0.0	11285.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	11877.5	0.0	11877.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.9	1.1
10°-20°	460.7	3.9
20°-30°	879.6	7.4
30°-40°	1577.8	13.3
40°-50°	2417.3	20.4
50°-60°	2809.5	23.7
60°-70°	2487.8	20.9
70°-80°	1073.1	9.0
80°-90°	43.0	0.4
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°	11877.5	100.0
0°-180°	11877.5	100.0

Coefficient of Utilization



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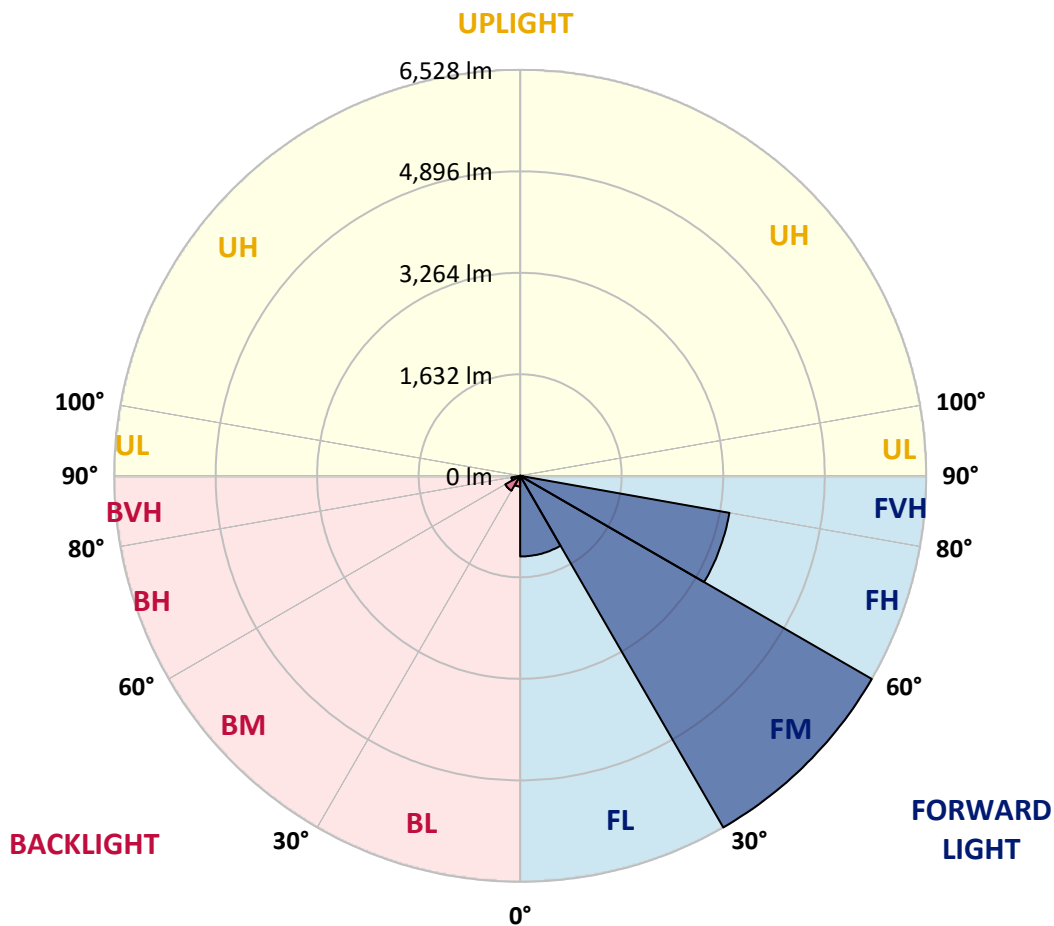
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1297.1	10.9			
FM (30°-60°)	6528.2	55.0			
FH (60°-80°)	3417.3	28.8			G2/5000
FVH (80°-90°)	42.4	0.4			G1/100
BL (0°-30°)	172.1	1.4	B1/500		
BM (30°-60°)	276.3	2.3	B1/1000		
BH (60°-80°)	143.6	1.2	B1/500		G1/500
BVH (80°-90°)	0.6	0.0			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1
2.5°	1820.6	1802.7	1784.7	1764.2	1718.1	1638.6	1538.6	1430.9	1297.6	1274.4	1166.8
5°	2210.5	2202.6	2184.7	2156.6	2105.3	2018.1	1905.3	1746.3	1523.2	1484.8	1256.5
7.5°	2484.8	2479.6	2464.3	2430.9	2384.8	2297.6	2179.6	2007.8	1748.8	1705.2	1369.3
10°	2730.9	2728.4	2715.5	2684.8	2638.6	2543.8	2418.1	2238.6	1964.3	1915.6	1500.1
12.5°	2954.1	2956.7	2951.5	2936.2	2902.8	2813.0	2669.4	2474.5	2172.0	2118.1	1656.5
15°	3084.8	3092.5	3113.1	3143.8	3154.1	3082.3	2933.5	2718.2	2384.8	2338.5	1836.0
17.5°	3041.2	3048.9	3113.1	3218.1	3318.2	3328.5	3195.1	2948.9	2595.0	2548.9	2013.0
20°	2936.2	2946.4	3013.1	3156.6	3351.5	3487.4	3433.6	3200.2	2795.1	2738.7	2182.2
22.5°	3054.1	3054.1	3074.5	3161.8	3338.8	3551.5	3623.4	3451.5	3000.3	2931.0	2351.5
25°	3459.2	3451.5	3407.9	3372.1	3428.4	3618.2	3766.9	3707.9	3241.2	3161.8	2531.0
27.5°	3972.1	4007.9	3925.9	3795.1	3667.0	3749.0	3895.1	3961.8	3507.9	3425.9	2715.5
30°	4546.5	4561.9	4464.5	4290.1	4064.3	3984.9	4046.4	4179.8	3797.8	3707.9	2907.9
32.5°	5064.5	5051.6	4969.5	4787.5	4508.0	4336.2	4241.3	4354.1	4113.1	4010.6	3105.3
35°	5523.5	5533.8	5433.7	5223.4	4949.0	4767.0	4541.4	4551.6	4466.9	4349.1	3333.6
37.5°	5936.3	5918.3	5823.5	5613.2	5364.5	5167.0	4928.5	4756.7	4854.2	4731.2	3590.0
40°	6272.2	6254.3	6154.2	5949.1	5715.8	5554.2	5367.1	5031.1	5261.9	5120.9	3864.4
42.5°	6538.9	6518.4	6433.7	6236.3	6010.7	5867.1	5777.3	5369.5	5697.9	5556.8	4172.1
45°	6669.7	6651.7	6600.5	6451.8	6254.3	6128.6	6172.2	5759.4	6164.5	6046.5	4510.6
47.5°	6515.7	6508.1	6567.1	6541.5	6428.6	6361.9	6513.3	6185.0	6654.3	6538.9	4900.4
50°	6049.1	6061.9	6233.8	6446.7	6500.5	6579.9	6792.7	6633.7	7180.0	7056.9	5349.2
52.5°	4897.8	4985.0	5503.0	6015.9	6413.3	6713.3	7121.0	7274.8	8036.4	7916.0	6049.1
55°	3656.7	3692.5	4256.7	5133.6	6061.9	6703.0	7364.6	7651.8	8459.5	8336.5	6233.8
57.5°	2900.2	2913.1	3192.5	4087.5	5338.9	6472.2	7492.8	7787.7	8644.1	8541.6	6508.1
60°	2277.1	2292.5	2495.1	3110.5	4320.7	5849.0	7308.3	7905.7	9005.7	8923.6	6987.6
62.5°	1771.9	1787.3	1910.4	2271.9	3241.2	4890.1	6936.4	8095.4	9692.9	9654.4	7772.3
65°	1371.9	1377.0	1461.7	1630.9	2289.8	3851.5	6482.5	8272.3	10621.2	10587.9	8408.3
67.5°	1013.0	1020.6	1079.6	1184.7	1546.2	2766.9	5738.9	8136.4	11321.3	11223.8	8639.0
69°	818.1	825.7	877.1	961.6	1220.7	2179.6	5059.4	7800.6	11426.5	11334.1	8492.9
70°	700.1	705.2	756.5	828.3	1041.1	1851.4	4520.8	7510.8	11287.9	11198.2	8159.5
72.5°	448.7	474.4	525.6	571.9	689.8	1225.7	3051.5	6228.7	9739.2	9585.4	6390.1
75°	248.8	256.4	348.7	405.2	459.0	797.5	1697.6	3884.9	6195.3	6087.6	3418.1
77.5°	205.2	210.4	246.2	307.7	307.7	446.3	641.1	1530.8	2356.6	2125.7	925.8
80°	143.5	148.7	187.2	202.5	220.4	251.3	207.7	336.0	364.2	323.1	138.4
82.5°	100.0	105.1	128.2	166.7	176.9	118.0	76.9	100.0	105.1	105.1	53.9
85°	17.9	25.6	94.8	138.4	105.1	35.9	43.6	35.9	33.4	35.9	12.8
87.5°	0.0	0.0	59.0	66.6	56.4	15.4	17.9	12.8	7.6	10.3	5.1
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°	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1
2.5°	1113.0	1059.0	966.7	900.1	843.7	800.1	782.1	753.9	733.3	743.6	730.8
5°	1143.6	1048.8	900.1	805.1	738.5	682.1	635.9	600.1	571.9	566.7	561.6
7.5°	1192.3	1056.5	861.6	743.6	643.6	556.4	484.7	430.8	389.7	389.7	374.4
10°	1259.1	1077.0	838.6	682.1	533.4	415.4	343.6	292.4	271.8	269.3	264.1
12.5°	1351.4	1115.4	820.5	602.6	415.4	302.5	259.0	241.0	233.4	230.7	228.3
15°	1477.0	1172.0	800.1	505.3	315.4	248.8	230.7	215.3	207.7	205.2	202.5
17.5°	1597.6	1223.1	756.5	405.2	256.4	225.6	205.2	192.3	182.0	179.5	179.5
20°	1710.4	1266.8	682.1	315.4	230.7	202.5	182.0	166.7	156.5	153.8	153.8
22.5°	1828.4	1302.7	589.8	256.4	210.4	179.5	159.0	143.5	133.3	130.8	128.2
25°	1954.0	1328.3	484.7	228.3	189.8	159.0	135.9	123.1	115.4	112.9	110.3
27.5°	2089.9	1338.5	384.6	207.7	166.7	138.4	118.0	105.1	100.0	97.5	97.5
30°	2212.9	1328.3	297.4	184.6	146.2	120.5	102.6	92.4	87.2	84.5	84.5
32.5°	2341.2	1302.7	238.5	164.1	128.2	102.6	87.2	79.5	76.9	74.4	74.4
35°	2477.1	1269.3	205.2	146.2	110.3	89.7	76.9	71.8	69.3	66.6	66.6
37.5°	2636.1	1228.3	187.2	130.8	97.5	79.5	66.6	64.1	61.5	61.5	61.5
40°	2815.6	1177.0	174.4	118.0	87.2	69.3	59.0	56.4	53.9	53.9	53.9
42.5°	3005.2	1118.0	161.6	105.1	76.9	59.0	51.3	51.3	48.7	48.7	46.1
45°	3218.1	1059.0	148.7	92.4	66.6	51.3	43.6	41.1	41.1	38.5	38.5
47.5°	3469.4	1005.1	135.9	82.1	59.0	43.6	38.5	35.9	33.4	30.8	30.8
50°	3823.3	1000.0	120.5	71.8	53.9	35.9	30.8	28.2	25.6	23.1	23.1
52.5°	4174.7	954.0	102.6	59.0	43.6	30.8	23.1	20.5	17.9	17.9	15.4
55°	4254.1	877.1	89.7	51.3	33.4	23.1	17.9	12.8	12.8	10.3	10.3
57.5°	4428.5	841.1	76.9	41.1	25.6	17.9	10.3	7.6	7.6	7.6	7.6
60°	4772.1	830.8	66.6	35.9	17.9	12.8	7.6	5.1	5.1	2.5	2.5
62.5°	5246.5	820.5	56.4	30.8	12.8	7.6	5.1	2.5	0.0	0.0	0.0
65°	5508.1	751.3	46.1	23.1	10.3	7.6	2.5	0.0	0.0	0.0	0.0
67.5°	5438.8	620.6	41.1	15.4	7.6	5.1	2.5	0.0	0.0	0.0	0.0
69°	5149.1	523.2	33.4	12.8	7.6	5.1	2.5	0.0	0.0	0.0	0.0
70°	4800.3	451.4	30.8	10.3	5.1	2.5	2.5	0.0	0.0	0.0	0.0
72.5°	3407.9	235.9	20.5	7.6	5.1	2.5	0.0	0.0	0.0	0.0	0.0
75°	1592.5	105.1	12.8	5.1	2.5	2.5	0.0	0.0	0.0	0.0	0.0
77.5°	351.3	48.7	7.6	5.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	66.6	17.9	5.1	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.1	7.6	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.0	0.0	0.0	0.0	0.0	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)