

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: P236965

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-120-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 530mA 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: 13540.8 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

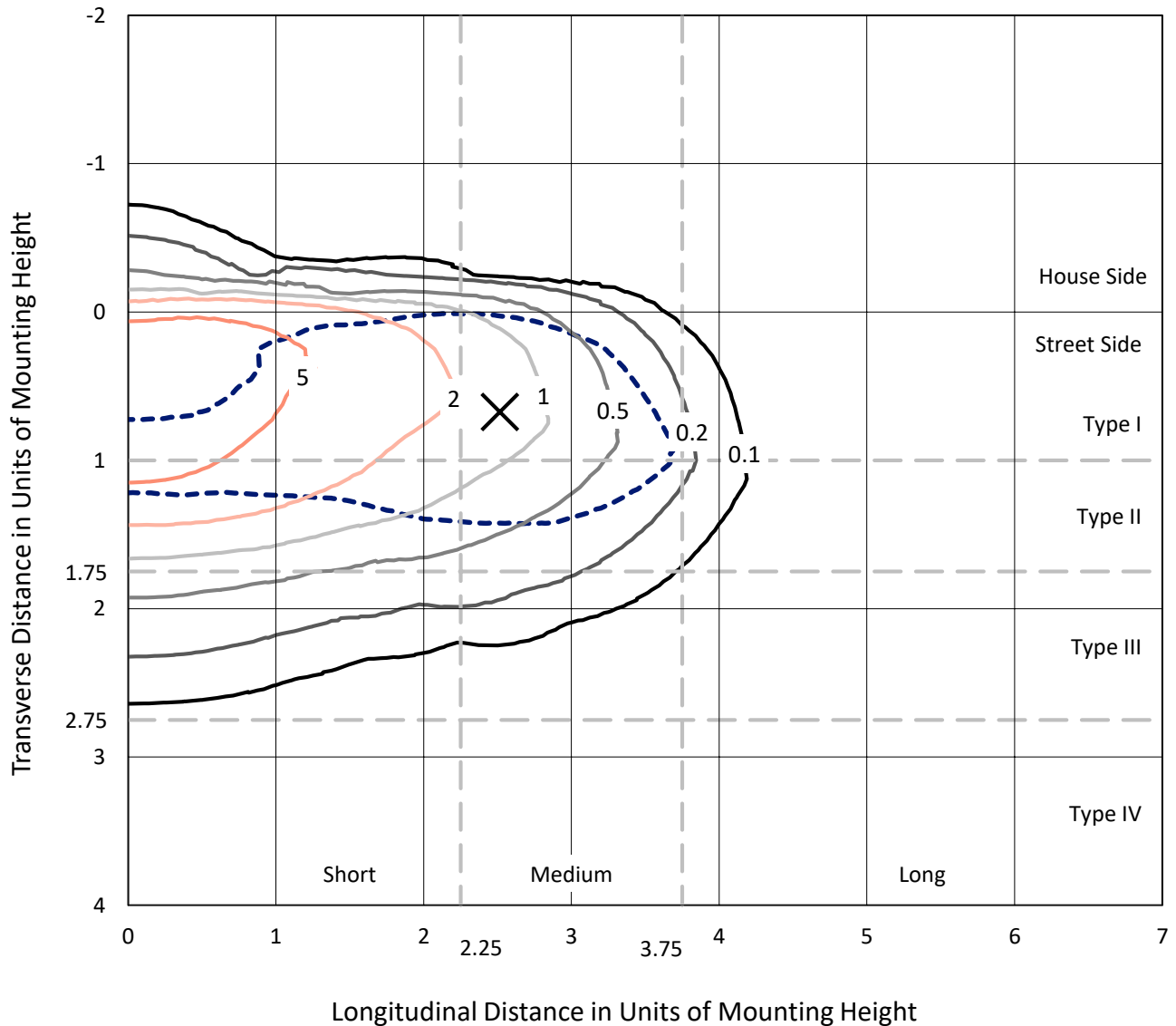
Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

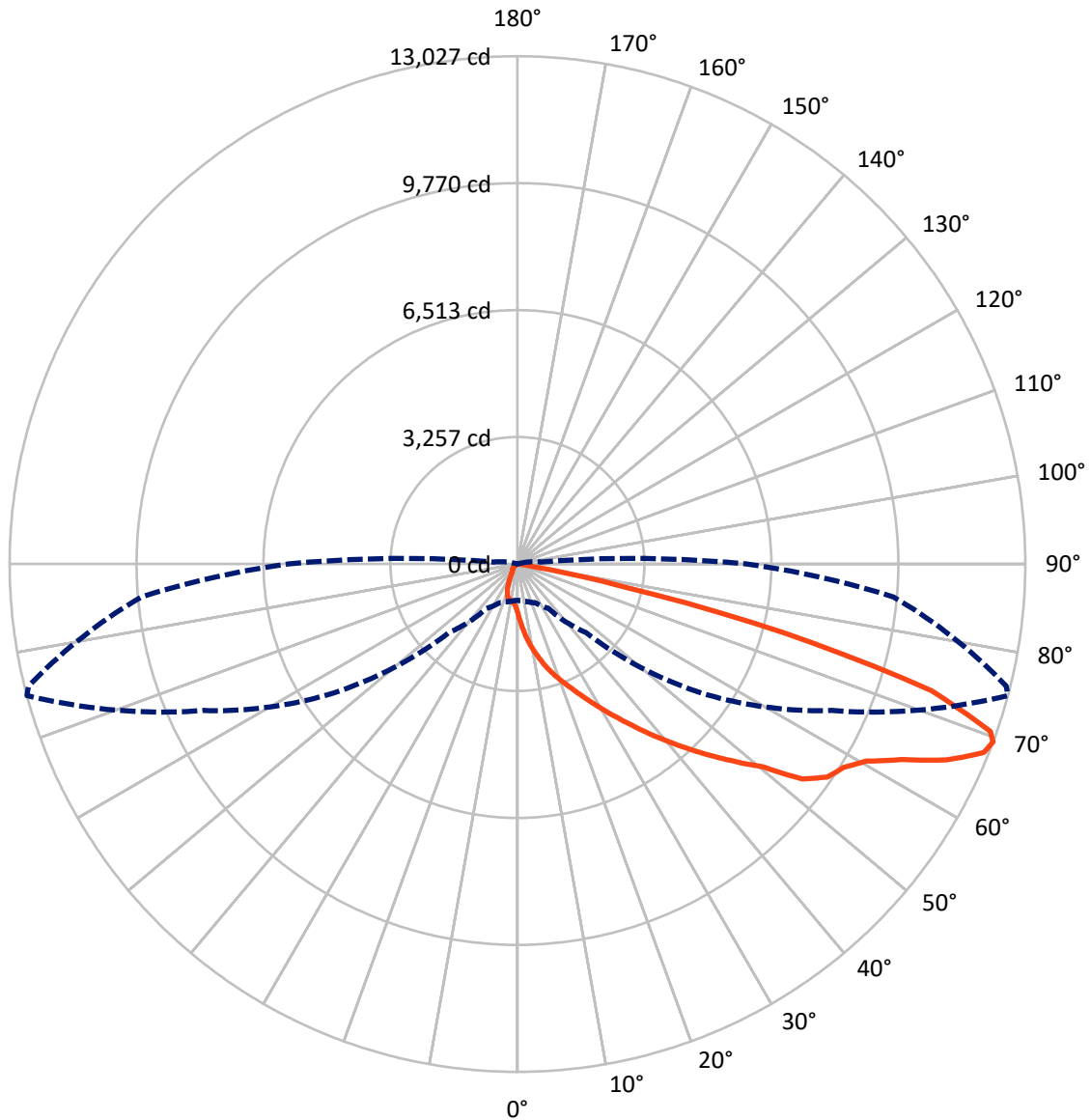
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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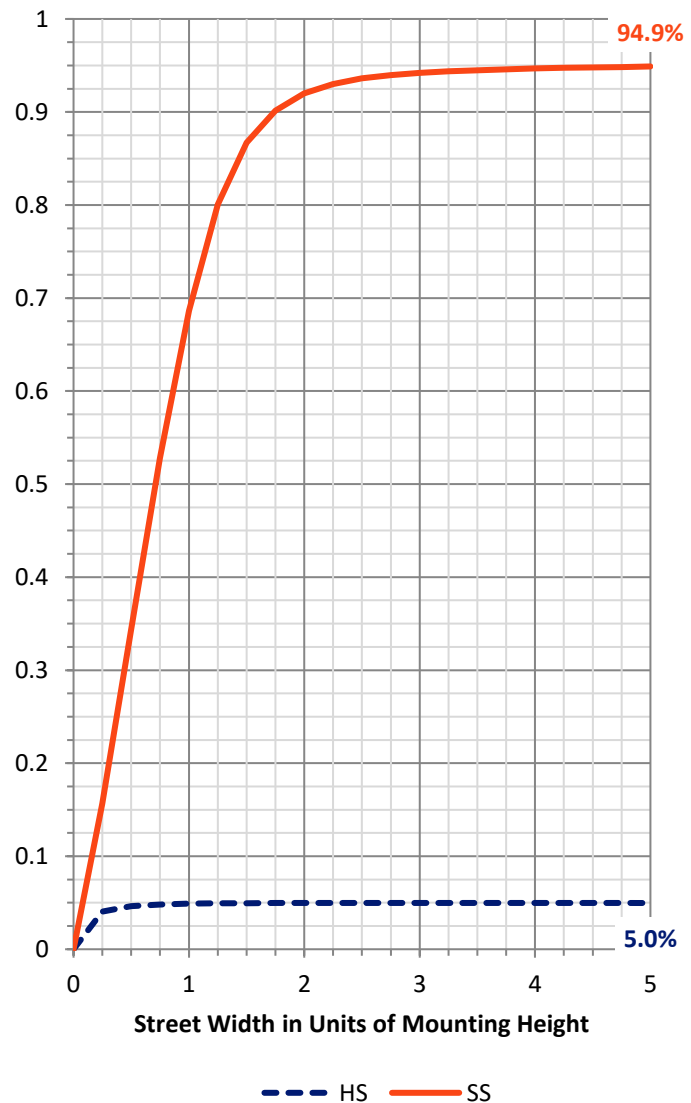
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	675.6	0.0	675.6
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	12865.2	0.0	12865.2
	% Fixture	95.0	0.0	95.0
Total	Lumens	13540.8	0.0	13540.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.9	1.1
10°-20°	525.2	3.9
20°-30°	1002.7	7.4
30°-40°	1798.7	13.3
40°-50°	2755.8	20.4
50°-60°	3202.9	23.7
60°-70°	2836.2	20.9
70°-80°	1223.4	9.0
80°-90°	49.0	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°	13540.8	100.0
0°-180°	13540.8	100.0

Coefficient of Utilization



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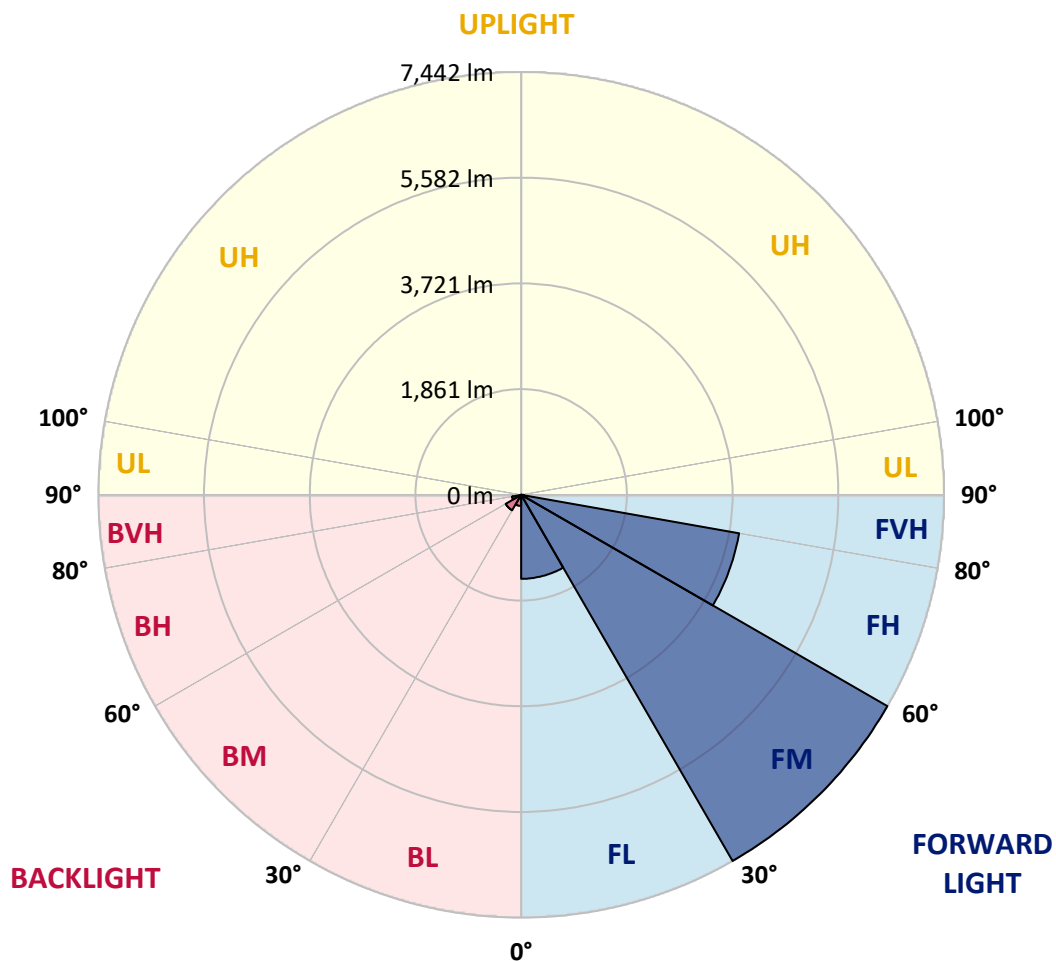
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1478.7	10.9			
FM	(30°-60°)	7442.4	55.0			
FH	(60°-80°)	3895.9	28.8			G2/5000
FVH	(80°-90°)	48.3	0.4			G1/100
BL	(0°-30°)	196.2	1.4	B1/500		
BM	(30°-60°)	315.0	2.3	B1/1000		
BH	(60°-80°)	163.7	1.2	B1/500		G1/500
BVH	(80°-90°)	0.7	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°	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0
2.5°	2075.6	2055.1	2034.6	2011.2	1958.6	1868.0	1754.1	1631.2	1479.2	1452.9	1330.1
5°	2519.9	2511.1	2490.7	2458.6	2400.0	2300.7	2172.0	1990.8	1736.5	1692.6	1432.4
7.5°	2832.8	2826.9	2809.3	2771.4	2718.7	2619.4	2484.8	2289.0	1993.7	1944.0	1561.0
10°	3113.4	3110.5	3095.9	3060.8	3008.1	2900.0	2756.8	2552.1	2239.3	2183.8	1710.2
12.5°	3367.7	3370.6	3364.8	3347.2	3309.2	3207.0	3043.2	2821.0	2476.1	2414.7	1888.5
15°	3516.8	3525.6	3548.9	3584.0	3595.8	3513.8	3344.3	3098.7	2718.7	2666.1	2093.2
17.5°	3467.1	3475.9	3548.9	3668.8	3782.9	3794.5	3642.5	3361.8	2958.5	2905.8	2294.8
20°	3347.2	3359.0	3435.0	3598.6	3820.8	3975.8	3914.4	3648.4	3186.5	3122.1	2487.8
22.5°	3481.7	3481.7	3505.1	3604.5	3806.2	4048.8	4130.7	3934.9	3420.3	3341.4	2680.7
25°	3943.6	3934.9	3885.2	3844.2	3908.5	4124.8	4294.4	4227.1	3695.1	3604.5	2885.3
27.5°	4528.3	4569.2	4475.6	4326.6	4180.4	4274.0	4440.5	4516.6	3999.1	3905.6	3095.9
30°	5183.1	5200.7	5089.6	4890.7	4633.6	4542.9	4613.1	4765.1	4329.5	4227.1	3315.1
32.5°	5773.6	5759.0	5665.5	5458.0	5139.3	4943.4	4835.2	4963.9	4689.1	4572.1	3540.2
35°	6296.9	6308.6	6194.6	5954.9	5642.1	5434.5	5177.3	5188.9	5092.5	4958.0	3800.4
37.5°	6767.5	6747.1	6639.0	6399.3	6115.7	5890.6	5618.7	5422.9	5534.0	5393.6	4092.7
40°	7150.5	7130.1	7016.0	6782.2	6516.2	6332.0	6118.6	5735.6	5998.7	5838.0	4405.5
42.5°	7454.5	7431.1	7334.7	7109.6	6852.3	6688.7	6586.4	6121.5	6495.7	6334.9	4756.3
45°	7603.7	7583.1	7524.7	7355.1	7130.1	6986.9	7036.5	6565.8	7027.8	6893.3	5142.2
47.5°	7428.3	7419.5	7486.7	7457.5	7328.8	7252.8	7425.3	7051.1	7586.1	7454.5	5586.5
50°	6896.2	6910.9	7106.6	7349.3	7410.7	7501.3	7743.9	7562.7	8185.3	8045.1	6098.1
52.5°	5583.6	5683.0	6273.6	6858.2	7311.3	7653.3	8118.1	8293.6	9161.8	9024.4	6896.2
55°	4168.7	4209.6	4852.8	5852.6	6910.9	7641.6	8395.9	8723.3	9644.2	9503.8	7106.6
57.5°	3306.3	3320.9	3639.6	4659.8	6086.5	7378.5	8542.0	8878.2	9854.6	9737.7	7419.5
60°	2595.9	2613.4	2844.4	3546.1	4925.8	6668.2	8331.5	9012.7	10266.8	10173.2	7966.1
62.5°	2020.0	2037.6	2177.9	2590.1	3695.1	5574.9	7907.7	9229.1	11050.3	11006.4	8860.7
65°	1564.0	1569.8	1666.3	1859.2	2610.6	4390.9	7390.2	9430.8	12108.6	12070.5	9585.7
67.5°	1154.7	1163.5	1230.7	1350.6	1762.7	3154.3	6542.5	9275.8	12906.6	12795.5	9848.8
69°	932.5	941.3	999.8	1096.3	1391.5	2484.8	5767.8	8892.8	13026.5	12921.2	9682.1
70°	798.1	803.9	862.3	944.3	1186.9	2110.7	5153.8	8562.5	12868.6	12766.3	9302.1
72.5°	511.6	540.8	599.2	651.9	786.3	1397.4	3478.7	7100.8	11102.9	10927.5	7285.0
75°	283.6	292.4	397.6	461.9	523.2	909.2	1935.2	4428.9	7062.9	6940.0	3896.8
77.5°	233.8	239.7	280.6	350.8	350.8	508.7	730.8	1745.3	2686.6	2423.5	1055.4
80°	163.7	169.6	213.4	231.0	251.4	286.5	236.8	383.0	415.1	368.4	157.8
82.5°	114.1	119.9	146.2	190.1	201.7	134.5	87.7	114.1	119.9	119.9	61.4
85°	20.5	29.3	108.1	157.8	119.9	40.9	49.7	40.9	38.1	40.9	14.6
87.5°	0.0	0.0	67.2	76.0	64.3	17.5	20.5	14.6	8.8	11.7	5.8
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°	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0
2.5°	1268.8	1207.4	1102.1	1026.1	961.8	912.1	891.6	859.5	836.1	847.8	833.2
5°	1303.9	1195.6	1026.1	917.9	841.9	777.6	725.0	684.0	651.9	646.1	640.3
7.5°	1359.4	1204.4	982.2	847.8	733.8	634.3	552.5	491.1	444.4	444.4	426.8
10°	1435.4	1227.8	955.9	777.6	608.0	473.6	391.7	333.3	309.9	307.0	301.2
12.5°	1540.6	1271.6	935.5	687.0	473.6	344.9	295.2	274.8	266.1	263.1	260.1
15°	1683.9	1336.0	912.1	575.9	359.6	283.6	263.1	245.6	236.8	233.8	231.0
17.5°	1821.3	1394.5	862.3	461.9	292.4	257.3	233.8	219.2	207.6	204.6	204.6
20°	1949.8	1444.1	777.6	359.6	263.1	231.0	207.6	190.1	178.3	175.4	175.4
22.5°	2084.4	1485.0	672.4	292.4	239.7	204.6	181.3	163.7	152.0	149.0	146.2
25°	2227.6	1514.3	552.5	260.1	216.4	181.3	155.0	140.3	131.6	128.6	125.7
27.5°	2382.6	1526.0	438.5	236.8	190.1	157.8	134.5	119.9	114.1	111.1	111.1
30°	2522.9	1514.3	339.1	210.5	166.6	137.4	116.9	105.3	99.4	96.5	96.5
32.5°	2669.0	1485.0	271.9	187.1	146.2	116.9	99.4	90.6	87.7	84.8	84.8
35°	2824.0	1447.1	233.8	166.6	125.7	102.3	87.7	81.8	79.0	76.0	76.0
37.5°	3005.2	1400.3	213.4	149.0	111.1	90.6	76.0	73.0	70.2	70.2	70.2
40°	3209.8	1341.8	198.8	134.5	99.4	79.0	67.2	64.3	61.4	61.4	61.4
42.5°	3426.2	1274.6	184.1	119.9	87.7	67.2	58.5	58.5	55.5	55.5	52.6
45°	3668.8	1207.4	169.6	105.3	76.0	58.5	49.7	46.7	46.7	43.9	43.9
47.5°	3955.3	1145.9	155.0	93.5	67.2	49.7	43.9	40.9	38.1	35.1	35.1
50°	4358.7	1140.1	137.4	81.8	61.4	40.9	35.1	32.1	29.3	26.3	26.3
52.5°	4759.2	1087.5	116.9	67.2	49.7	35.1	26.3	23.4	20.5	20.5	17.5
55°	4849.8	999.8	102.3	58.5	38.1	26.3	20.5	14.6	14.6	11.7	11.7
57.5°	5048.7	958.8	87.7	46.7	29.3	20.5	11.7	8.8	8.8	8.8	8.8
60°	5440.4	947.2	76.0	40.9	20.5	14.6	8.8	5.8	5.8	3.0	3.0
62.5°	5981.2	935.5	64.3	35.1	14.6	8.8	5.8	3.0	0.0	0.0	0.0
65°	6279.4	856.5	52.6	26.3	11.7	8.8	3.0	0.0	0.0	0.0	0.0
67.5°	6200.4	707.5	46.7	17.5	8.8	5.8	3.0	0.0	0.0	0.0	0.0
69°	5870.1	596.4	38.1	14.6	8.8	5.8	3.0	0.0	0.0	0.0	0.0
70°	5472.5	514.5	35.1	11.7	5.8	3.0	3.0	0.0	0.0	0.0	0.0
72.5°	3885.2	268.9	23.4	8.8	5.8	3.0	0.0	0.0	0.0	0.0	0.0
75°	1815.4	119.9	14.6	5.8	3.0	3.0	0.0	0.0	0.0	0.0	0.0
77.5°	400.5	55.5	8.8	5.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	76.0	20.5	5.8	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.3	8.8	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	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)