

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: P236972

Luminaire Tested: **ARCH-L-AF72-190-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236972
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-AF72-190-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 810mA 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: 19013.6 lumens
Efficiency: N/A
Efficacy: 100.6 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 - G3

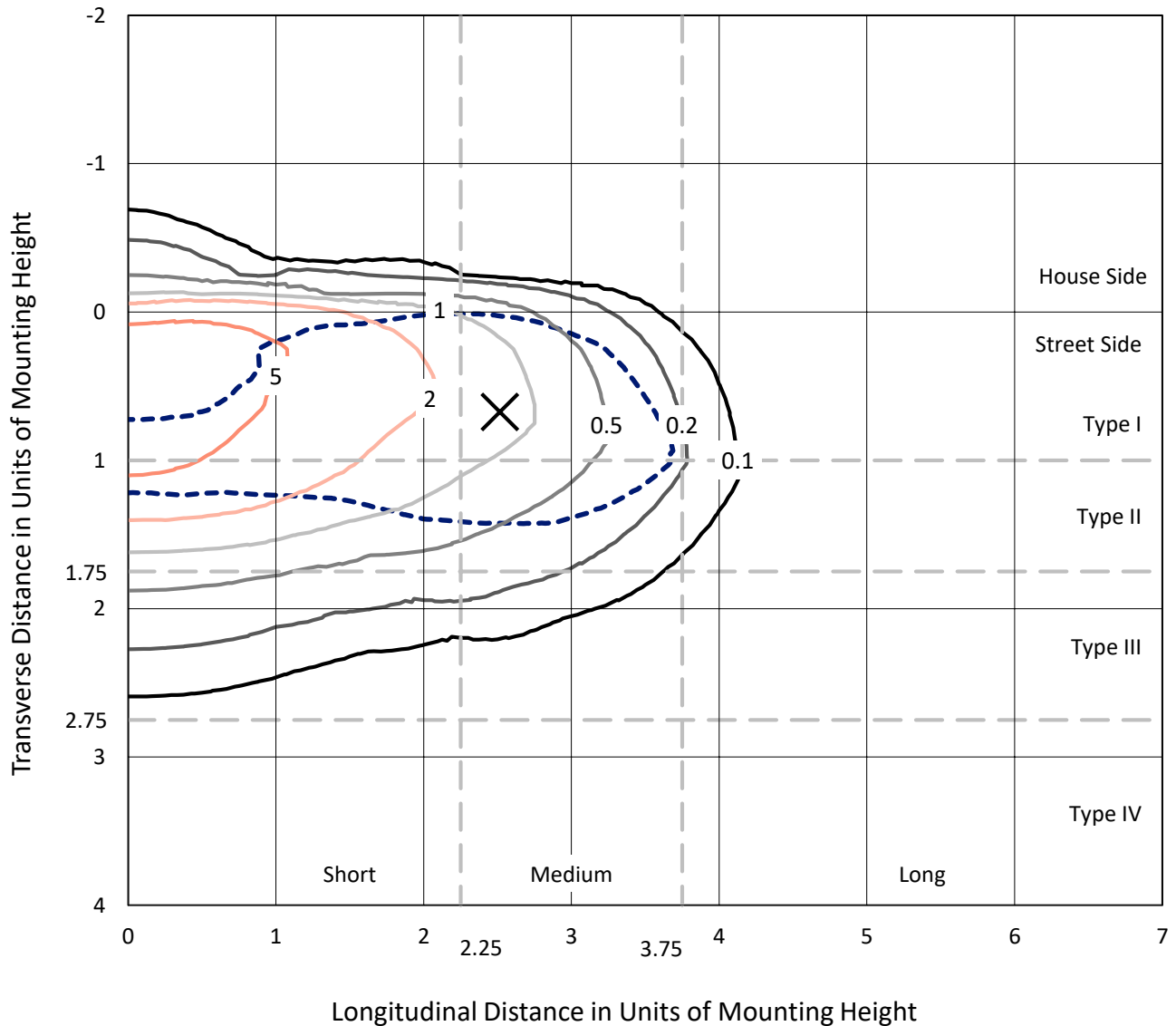
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

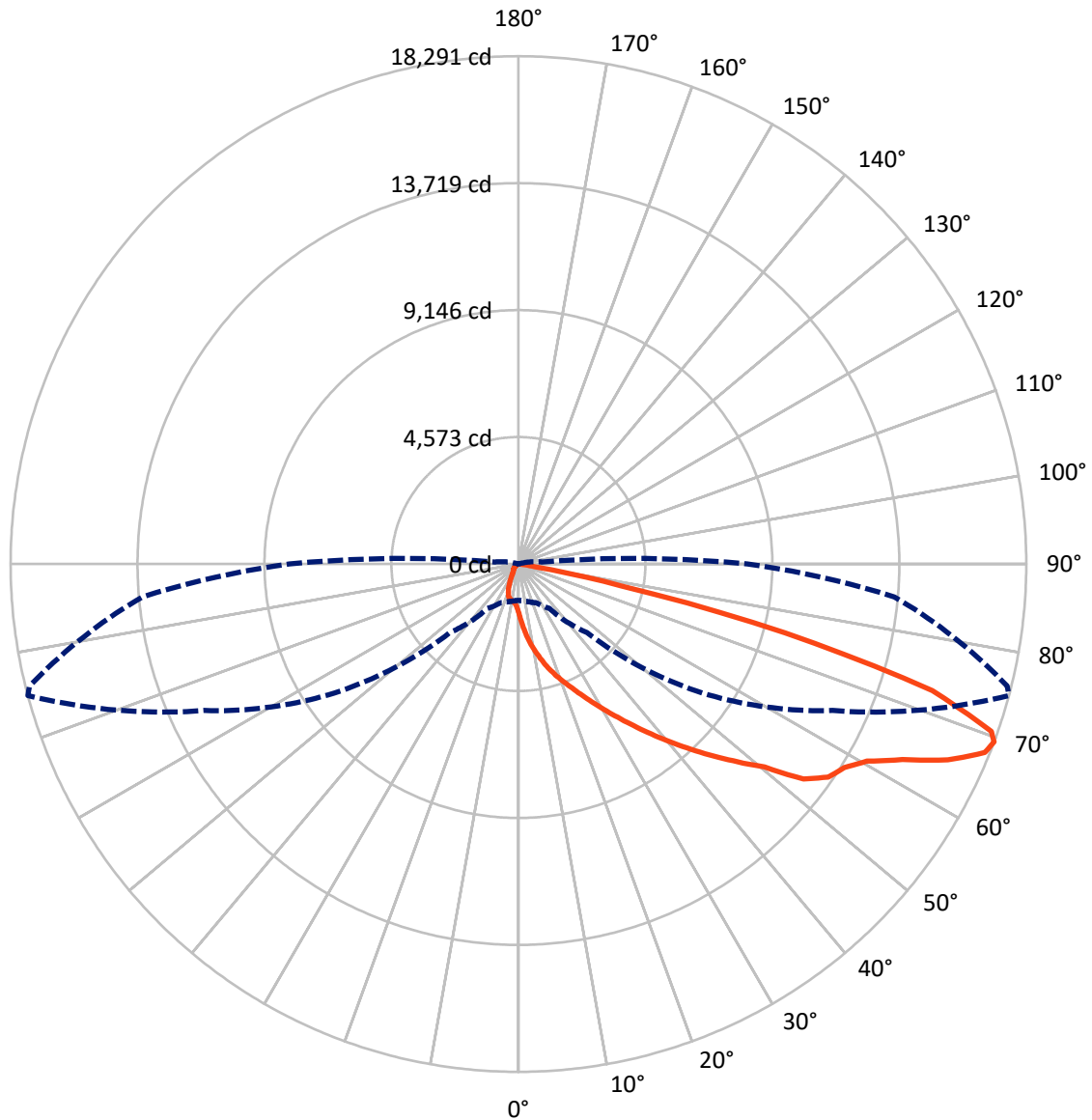
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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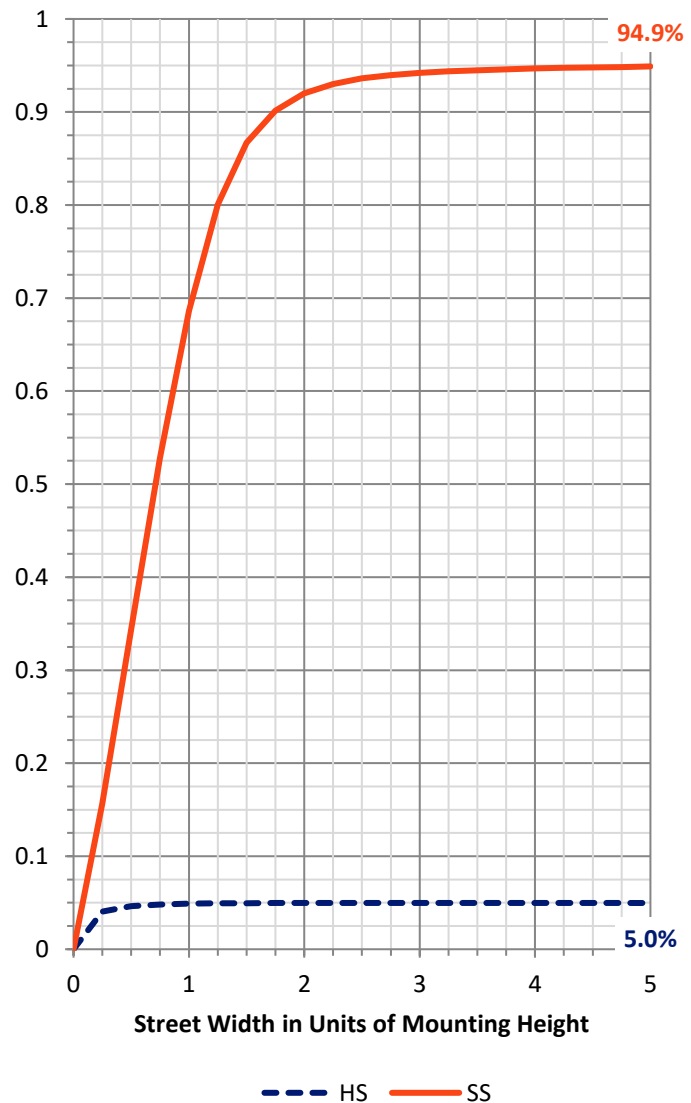
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	948.6	0.0	948.6
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	18064.9	0.0	18064.9
	% Fixture	95.0	0.0	95.0
Total	Lumens	19013.6	0.0	19013.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.3	1.1
10°-20°	737.5	3.9
20°-30°	1408.0	7.4
30°-40°	2525.7	13.3
40°-50°	3869.6	20.4
50°-60°	4497.4	23.7
60°-70°	3982.5	20.9
70°-80°	1717.8	9.0
80°-90°	68.8	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°	19013.6	100.0
0°-180°	19013.6	100.0

Coefficient of Utilization



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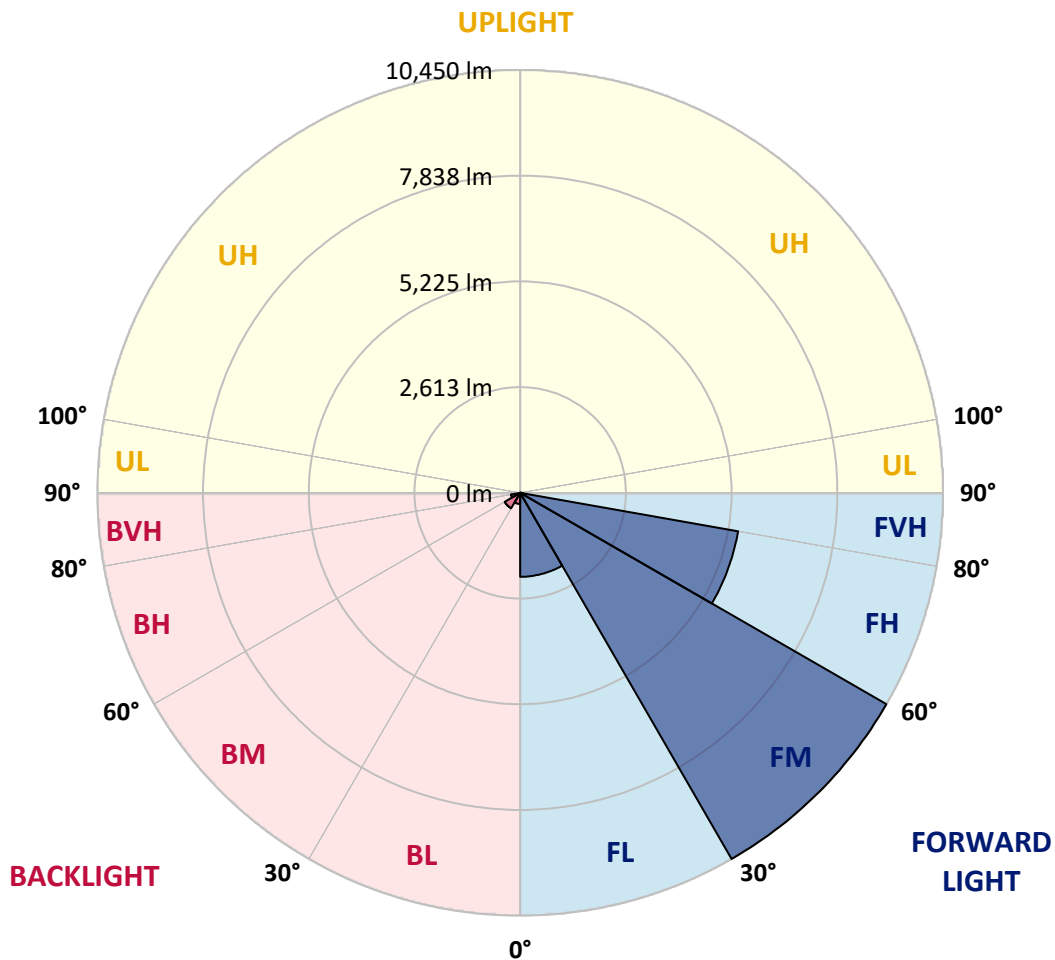
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2076.3	10.9			
FM	(30°-60°)	10450.3	55.0			
FH	(60°-80°)	5470.5	28.8			G3/7500
FVH	(80°-90°)	67.8	0.4			G1/100
BL	(0°-30°)	275.5	1.4	B1/500		
BM	(30°-60°)	442.3	2.3	B1/1000		
BH	(60°-80°)	229.8	1.2	B1/500		G1/500
BVH	(80°-90°)	1.0	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2
2.5°	2914.5	2885.7	2857.0	2824.2	2750.3	2623.1	2463.0	2290.5	2077.1	2040.2	1867.7
5°	3538.4	3526.1	3497.4	3452.3	3370.1	3230.6	3049.9	2795.4	2438.3	2376.7	2011.4
7.5°	3977.6	3969.5	3944.8	3891.4	3817.6	3678.0	3489.2	3214.1	2799.5	2729.7	2192.0
10°	4371.7	4367.6	4347.0	4297.8	4224.0	4072.1	3870.9	3583.6	3144.3	3066.4	2401.4
12.5°	4728.8	4732.9	4724.7	4700.0	4646.8	4503.0	4273.2	3961.2	3476.8	3390.7	2651.8
15°	4938.2	4950.5	4983.3	5032.6	5049.0	4934.1	4696.0	4351.2	3817.6	3743.7	2939.1
17.5°	4868.4	4880.7	4983.3	5151.7	5311.8	5328.1	5114.7	4720.6	4154.1	4080.2	3222.3
20°	4700.0	4716.5	4823.2	5053.1	5365.1	5582.7	5496.4	5122.9	4474.3	4384.1	3493.3
22.5°	4888.9	4888.9	4921.7	5061.4	5344.6	5685.3	5800.2	5525.2	4802.8	4691.9	3764.2
25°	5537.5	5525.2	5455.4	5397.9	5488.2	5791.9	6030.1	5935.7	5188.6	5061.4	4051.5
27.5°	6358.5	6415.9	6284.6	6075.2	5870.0	6001.3	6235.3	6342.1	5615.5	5484.1	4347.0
30°	7278.0	7302.6	7146.6	6867.5	6506.3	6379.0	6477.5	6691.0	6079.3	5935.7	4654.9
32.5°	8107.2	8086.6	7955.3	7663.8	7216.4	6941.3	6789.5	6970.1	6584.2	6420.0	4971.0
35°	8842.0	8858.3	8698.3	8361.7	7922.4	7631.0	7269.8	7286.2	7150.7	6961.9	5336.3
37.5°	9502.8	9474.1	9322.3	8985.6	8587.5	8271.4	7889.6	7614.5	7770.5	7573.5	5746.8
40°	10040.6	10011.8	9851.7	9523.4	9149.8	8891.2	8591.6	8053.8	8423.2	8197.4	6186.1
42.5°	10467.4	10434.6	10299.2	9983.1	9621.9	9392.0	9248.3	8595.7	9121.0	8895.3	6678.6
45°	10676.8	10648.1	10566.0	10327.9	10011.8	9810.7	9880.5	9219.5	9868.2	9679.4	7220.5
47.5°	10430.5	10418.2	10512.7	10471.5	10291.0	10184.2	10426.4	9901.0	10652.2	10467.4	7844.4
50°	9683.5	9703.9	9979.0	10319.7	10405.9	10533.1	10873.9	10619.4	11493.7	11296.7	8562.8
52.5°	7840.3	7979.9	8809.1	9630.1	10266.3	10746.6	11399.3	11645.6	12864.7	12671.8	9683.5
55°	5853.5	5911.0	6814.1	8218.0	9703.9	10730.1	11789.2	12249.0	13542.0	13345.0	9979.0
57.5°	4642.7	4663.1	5110.6	6543.2	8546.3	10360.8	11994.5	12466.5	13837.6	13673.4	10418.2
60°	3645.2	3669.7	3994.0	4979.2	6916.8	9363.3	11699.0	12655.3	14416.3	14285.0	11185.9
62.5°	2836.4	2861.1	3058.1	3636.9	5188.6	7828.0	11103.7	12959.2	15516.5	15454.9	12441.9
65°	2196.1	2204.4	2339.8	2610.7	3665.6	6165.5	10377.1	13242.4	17002.5	16949.1	13459.9
67.5°	1621.5	1633.8	1728.2	1896.4	2475.2	4429.2	9186.7	13024.8	18123.1	17967.1	13829.4
69°	1309.5	1321.8	1403.9	1539.3	1953.9	3489.2	8098.9	12487.1	18291.4	18143.6	13595.4
70°	1120.6	1128.8	1211.0	1325.8	1666.6	2963.7	7237.0	12023.3	18069.7	17926.1	13061.8
72.5°	718.3	759.4	841.5	915.4	1104.2	1962.1	4884.8	9970.8	15590.4	15344.1	10229.4
75°	398.1	410.5	558.2	648.6	734.8	1276.6	2717.5	6218.9	9917.4	9745.0	5471.9
77.5°	328.4	336.6	394.0	492.6	492.6	714.2	1026.2	2450.6	3772.4	3402.9	1481.8
80°	229.9	238.0	299.6	324.3	353.0	402.3	332.5	537.8	582.9	517.2	221.7
82.5°	160.1	168.3	205.2	266.8	283.3	188.8	123.2	160.1	168.3	168.3	86.2
85°	28.7	41.0	151.9	221.7	168.3	57.5	69.8	57.5	53.4	57.5	20.6
87.5°	0.0	0.0	94.4	106.7	90.3	24.7	28.7	20.6	12.3	16.5	8.2
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°	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2	1769.2
2.5°	1781.6	1695.3	1547.5	1440.8	1350.5	1280.7	1252.0	1206.9	1174.0	1190.4	1169.8
5°	1830.8	1678.9	1440.8	1288.9	1182.2	1091.9	1018.0	960.6	915.4	907.2	899.0
7.5°	1908.7	1691.2	1379.2	1190.4	1030.3	890.8	775.8	689.6	623.9	623.9	599.3
10°	2015.5	1724.1	1342.3	1091.9	853.9	665.0	550.0	468.0	435.2	431.0	422.8
12.5°	2163.2	1785.7	1313.6	964.6	665.0	484.4	414.6	385.9	373.6	369.5	365.3
15°	2364.4	1875.9	1280.7	808.6	504.9	398.1	369.5	344.8	332.5	328.4	324.3
17.5°	2557.4	1958.0	1211.0	648.6	410.5	361.2	328.4	307.9	291.4	287.3	287.3
20°	2737.9	2027.8	1091.9	504.9	369.5	324.3	291.4	266.8	250.4	246.3	246.3
22.5°	2926.8	2085.3	944.1	410.5	336.6	287.3	254.5	229.9	213.5	209.4	205.2
25°	3127.9	2126.3	775.8	365.3	303.7	254.5	217.6	197.0	184.7	180.7	176.6
27.5°	3345.5	2142.8	615.7	332.5	266.8	221.7	188.8	168.3	160.1	156.0	156.0
30°	3542.5	2126.3	476.2	295.5	233.9	192.9	164.2	147.8	139.5	135.4	135.4
32.5°	3747.8	2085.3	381.8	262.7	205.2	164.2	139.5	127.3	123.2	119.1	119.1
35°	3965.4	2031.9	328.4	233.9	176.6	143.6	123.2	115.0	110.8	106.7	106.7
37.5°	4219.9	1966.2	299.6	209.4	156.0	127.3	106.7	102.6	98.5	98.5	98.5
40°	4507.1	1884.2	279.2	188.8	139.5	110.8	94.4	90.3	86.2	86.2	86.2
42.5°	4810.9	1789.8	258.6	168.3	123.2	94.4	82.1	82.1	77.9	77.9	73.9
45°	5151.7	1695.3	238.0	147.8	106.7	82.1	69.8	65.7	65.7	61.6	61.6
47.5°	5553.9	1609.1	217.6	131.3	94.4	69.8	61.6	57.5	53.4	49.3	49.3
50°	6120.4	1600.9	192.9	115.0	86.2	57.5	49.3	45.1	41.0	36.9	36.9
52.5°	6682.7	1527.1	164.2	94.4	69.8	49.3	36.9	32.8	28.7	28.7	24.7
55°	6810.0	1403.9	143.6	82.1	53.4	36.9	28.7	20.6	20.6	16.5	16.5
57.5°	7089.2	1346.4	123.2	65.7	41.0	28.7	16.5	12.3	12.3	12.3	12.3
60°	7639.2	1329.9	106.7	57.5	28.7	20.6	12.3	8.2	8.2	4.1	4.1
62.5°	8398.6	1313.6	90.3	49.3	20.6	12.3	8.2	4.1	0.0	0.0	0.0
65°	8817.3	1202.7	73.9	36.9	16.5	12.3	4.1	0.0	0.0	0.0	0.0
67.5°	8706.4	993.4	65.7	24.7	12.3	8.2	4.1	0.0	0.0	0.0	0.0
69°	8242.6	837.4	53.4	20.6	12.3	8.2	4.1	0.0	0.0	0.0	0.0
70°	7684.3	722.5	49.3	16.5	8.2	4.1	4.1	0.0	0.0	0.0	0.0
72.5°	5455.4	377.7	32.8	12.3	8.2	4.1	0.0	0.0	0.0	0.0	0.0
75°	2549.1	168.3	20.6	8.2	4.1	4.1	0.0	0.0	0.0	0.0	0.0
77.5°	562.4	77.9	12.3	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	106.7	28.7	8.2	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.9	12.3	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	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)