

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: P236971

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236971
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-AF72-180-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 775mA 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: 18373.2 lumens
Efficiency: N/A
Efficacy: 101.5 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

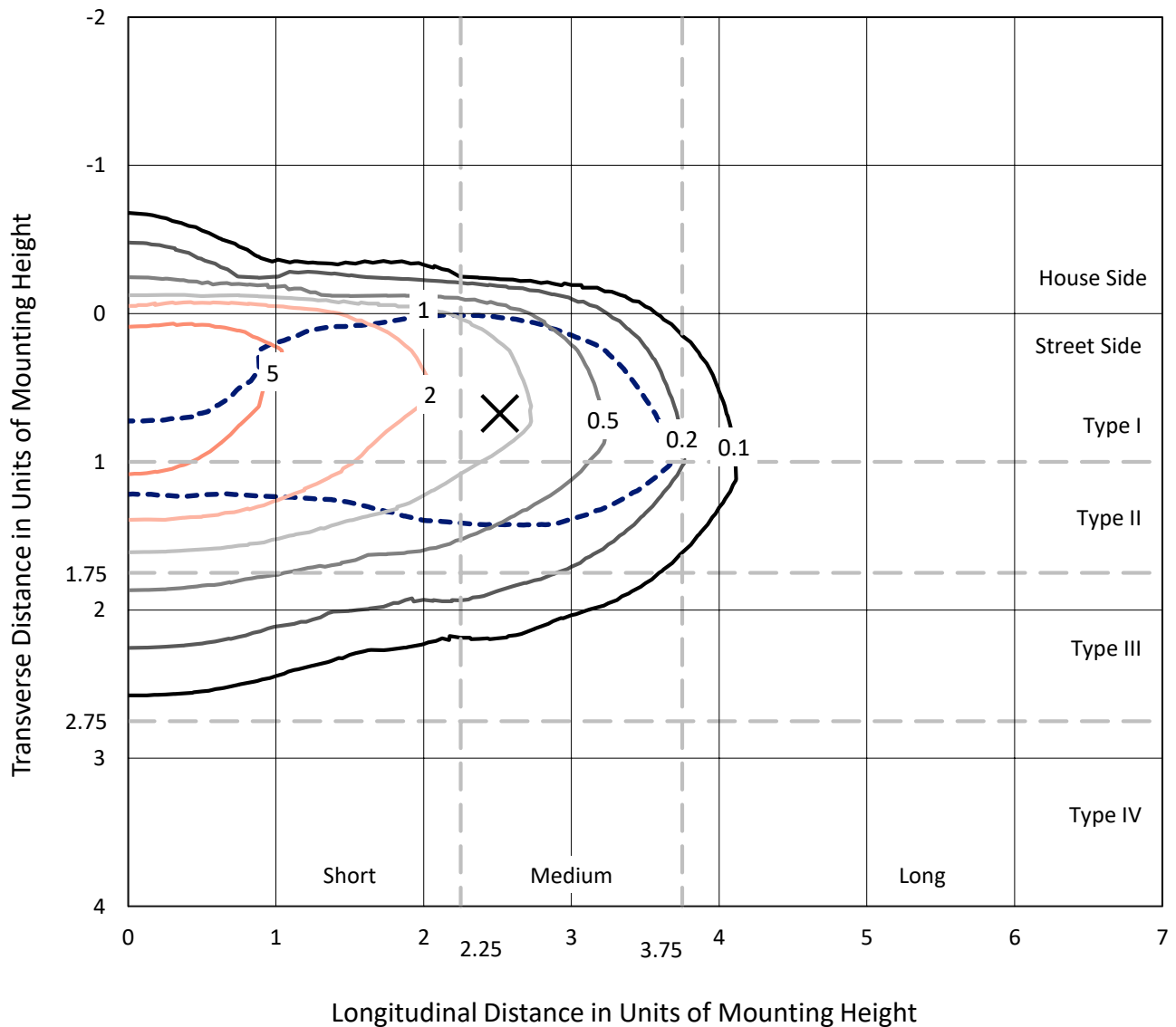
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

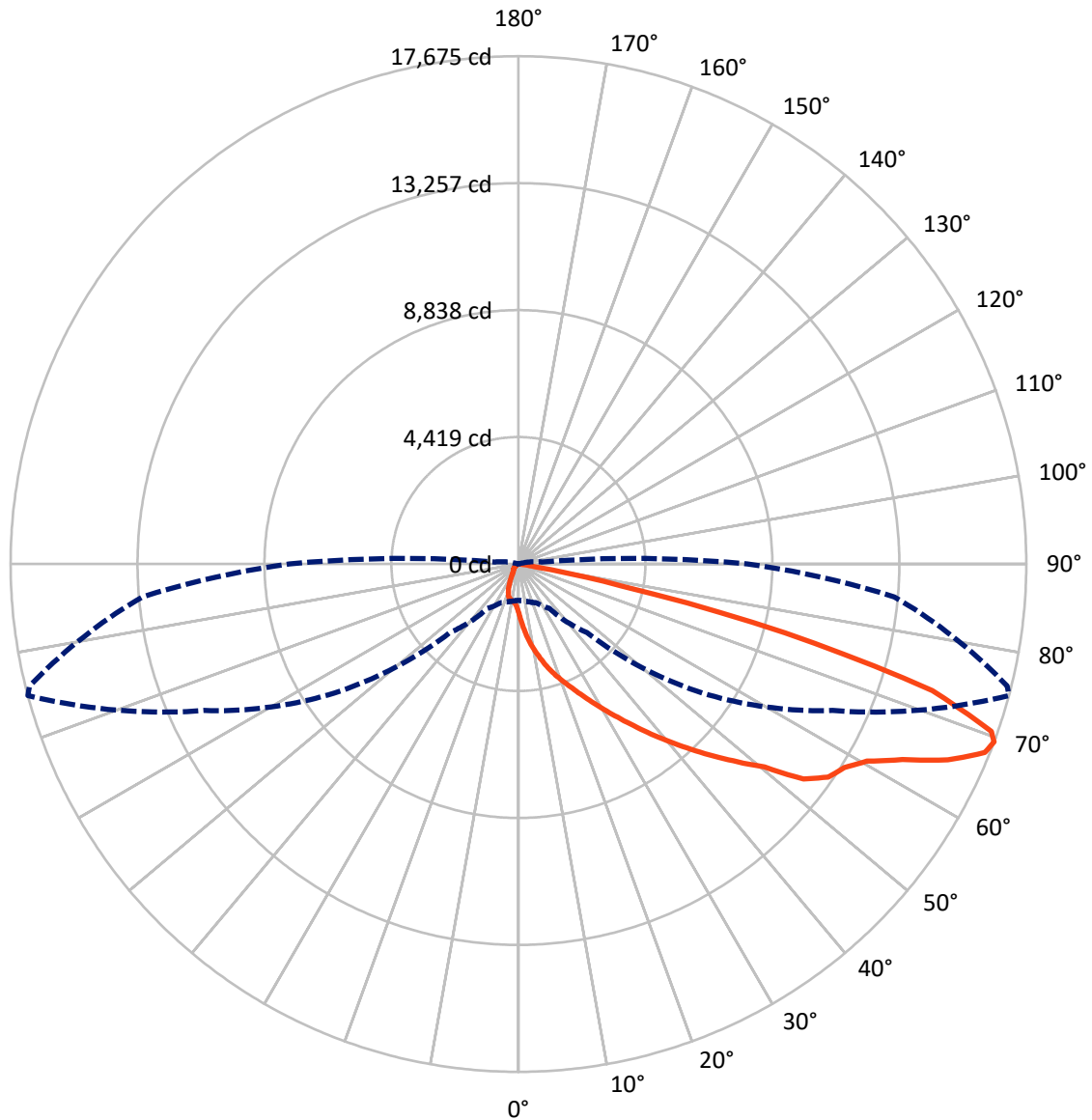
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 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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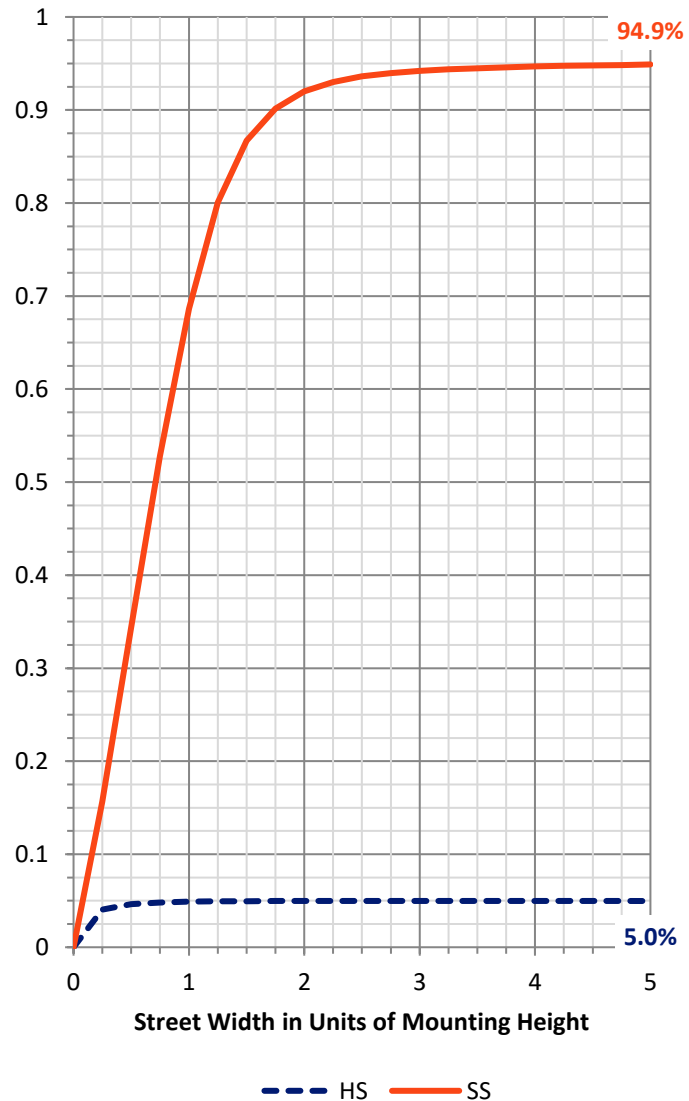
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	916.7	0.0	916.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	17456.5	0.0	17456.5
	% Fixture	95.0	0.0	95.0
Total	Lumens	18373.2	0.0	18373.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.4	1.1
10°-20°	712.7	3.9
20°-30°	1360.6	7.4
30°-40°	2440.6	13.3
40°-50°	3739.2	20.4
50°-60°	4345.9	23.7
60°-70°	3848.4	20.9
70°-80°	1660.0	9.0
80°-90°	66.5	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°	18373.2	100.0
0°-180°	18373.2	100.0

Coefficient of Utilization



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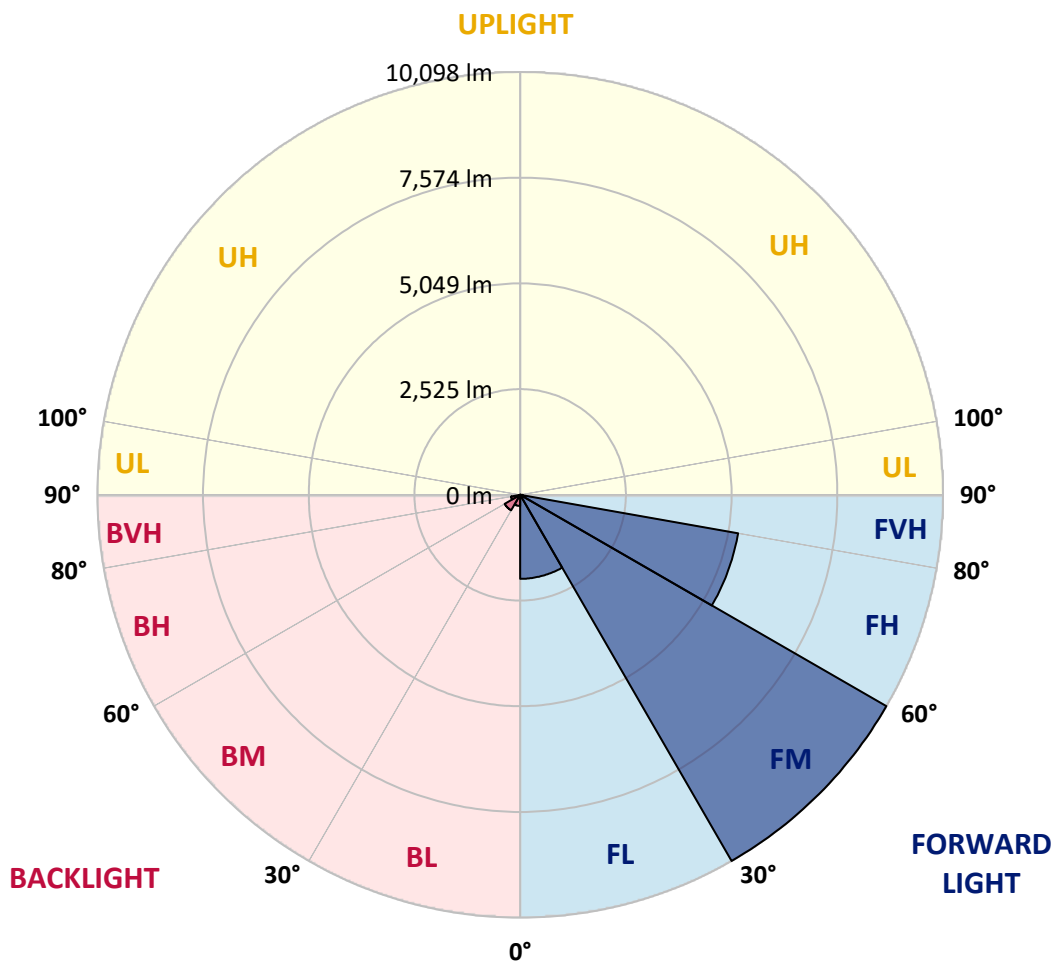
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2006.4	10.9			
FM	(30°-60°)	10098.4	55.0			
FH	(60°-80°)	5286.2	28.8			G3/7500
FVH	(80°-90°)	65.5	0.4			G1/100
BL	(0°-30°)	266.2	1.4	B1/500		
BM	(30°-60°)	427.4	2.3	B1/1000		
BH	(60°-80°)	222.1	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°	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7
2.5°	2816.3	2788.6	2760.7	2729.0	2657.6	2534.7	2380.0	2213.4	2007.1	1971.4	1804.8
5°	3419.2	3407.3	3379.6	3335.9	3256.6	3121.7	2947.2	2701.3	2356.2	2296.7	1943.6
7.5°	3843.6	3835.8	3811.9	3760.4	3689.0	3554.1	3371.6	3105.9	2705.3	2637.8	2118.2
10°	4224.5	4220.5	4200.6	4153.1	4081.7	3934.9	3740.5	3462.9	3038.5	2963.1	2320.5
12.5°	4569.5	4573.5	4565.6	4541.8	4490.2	4351.4	4129.2	3827.8	3359.8	3276.4	2562.5
15°	4771.9	4783.7	4815.5	4863.1	4879.0	4767.9	4537.8	4204.6	3689.0	3617.6	2840.1
17.5°	4704.4	4716.3	4815.5	4978.1	5132.9	5148.7	4942.4	4561.6	4014.3	3942.9	3113.9
20°	4541.8	4557.7	4660.8	4883.0	5184.4	5394.6	5311.4	4950.4	4323.6	4236.3	3375.6
22.5°	4724.3	4724.3	4756.0	4890.8	5164.6	5493.8	5604.8	5339.1	4640.9	4533.8	3637.4
25°	5351.0	5339.1	5271.7	5216.1	5303.4	5597.0	5827.0	5735.8	5013.8	4890.8	3915.0
27.5°	6144.4	6199.9	6073.0	5870.6	5672.3	5799.2	6025.3	6128.5	5426.3	5299.4	4200.6
30°	7032.9	7056.6	6905.9	6636.2	6287.2	6164.2	6259.3	6465.7	5874.6	5735.8	4498.1
32.5°	7834.1	7814.3	7687.4	7405.8	6973.4	6707.6	6560.8	6735.3	6362.4	6203.8	4803.6
35°	8544.1	8560.1	8405.3	8080.1	7655.7	7373.9	7024.9	7040.8	6909.9	6727.4	5156.6
37.5°	9182.7	9155.0	9008.2	8683.0	8298.2	7992.8	7623.8	7358.1	7508.9	7318.5	5553.3
40°	9702.4	9674.7	9519.9	9202.6	8841.7	8591.8	8302.2	7782.5	8139.5	7921.4	5977.7
42.5°	10114.9	10083.2	9952.3	9646.8	9297.8	9075.6	8936.8	8306.2	8813.8	8595.8	6453.7
45°	10317.3	10289.5	10210.2	9980.1	9674.7	9480.3	9547.7	8909.1	9535.8	9353.4	6977.3
47.5°	10079.2	10067.4	10158.5	10118.9	9944.4	9841.2	10075.2	9567.6	10293.4	10114.9	7580.3
50°	9357.3	9377.1	9642.9	9972.1	10055.4	10178.4	10507.6	10261.7	11106.6	10916.2	8274.4
52.5°	7576.3	7711.1	8512.4	9305.8	9920.6	10384.7	11015.3	11253.4	12431.4	12245.0	9357.3
55°	5656.4	5712.0	6584.6	7941.2	9377.1	10368.8	11392.2	11836.5	13085.9	12895.5	9642.9
57.5°	4486.3	4506.1	4938.5	6322.9	8258.6	10011.8	11590.5	12046.7	13371.5	13212.8	10067.4
60°	3522.3	3546.2	3859.5	4811.6	6683.8	9047.9	11304.9	12229.2	13930.9	13803.9	10809.1
62.5°	2741.0	2764.7	2955.1	3514.4	5013.8	7564.4	10729.7	12522.7	14993.9	14934.4	12022.8
65°	2122.1	2130.1	2261.0	2522.8	3542.2	5957.9	10027.7	12796.4	16429.8	16378.3	13006.6
67.5°	1566.9	1578.7	1670.0	1832.6	2391.9	4280.0	8877.4	12586.2	17512.7	17361.9	13363.6
69°	1265.4	1277.3	1356.6	1487.5	1888.2	3371.6	7826.2	12066.5	17675.4	17532.6	13137.6
70°	1082.9	1090.9	1170.2	1281.2	1610.4	2864.0	6993.2	11618.3	17461.2	17322.3	12621.9
72.5°	694.2	733.9	813.1	884.5	1067.0	1896.0	4720.3	9635.0	15065.3	14827.3	9884.9
75°	384.7	396.7	539.5	626.8	710.0	1233.6	2625.9	6009.4	9583.4	9416.8	5287.5
77.5°	317.3	325.3	380.8	476.0	476.0	690.2	991.6	2368.1	3645.4	3288.4	1431.9
80°	222.1	230.1	289.6	313.3	341.2	388.7	321.3	519.7	563.2	499.8	214.2
82.5°	154.7	162.6	198.4	257.8	273.7	182.5	119.0	154.7	162.6	162.6	83.3
85°	27.7	39.7	146.8	214.2	162.6	55.5	67.4	55.5	51.6	55.5	19.8
87.5°	0.0	0.0	91.2	103.1	87.3	23.8	27.7	19.8	11.9	15.9	8.0
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°	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7	1709.7
2.5°	1721.5	1638.3	1495.5	1392.3	1305.0	1237.6	1209.8	1166.2	1134.5	1150.3	1130.5
5°	1769.1	1622.4	1392.3	1245.5	1142.4	1055.2	983.8	928.2	884.5	876.7	868.7
7.5°	1844.5	1634.3	1332.8	1150.3	995.6	860.7	749.7	666.4	602.9	602.9	579.1
10°	1947.6	1666.0	1297.1	1055.2	825.0	642.6	531.5	452.2	420.4	416.5	408.6
12.5°	2090.4	1725.5	1269.3	932.1	642.6	468.1	400.6	372.9	361.0	357.0	353.0
15°	2284.8	1812.8	1237.6	781.4	487.9	384.7	357.0	333.2	321.3	317.3	313.3
17.5°	2471.2	1892.0	1170.2	626.8	396.7	349.0	317.3	297.5	281.6	277.6	277.6
20°	2645.8	1959.6	1055.2	487.9	357.0	313.3	281.6	257.8	241.9	238.0	238.0
22.5°	2828.3	2015.0	912.4	396.7	325.3	277.6	245.9	222.1	206.2	202.3	198.4
25°	3022.6	2054.7	749.7	353.0	293.5	245.9	210.2	190.4	178.5	174.5	170.5
27.5°	3232.8	2070.6	594.9	321.3	257.8	214.2	182.5	162.6	154.7	150.8	150.8
30°	3423.2	2054.7	460.1	285.6	226.1	186.4	158.7	142.8	134.8	130.9	130.9
32.5°	3621.6	2015.0	368.9	253.9	198.4	158.7	134.8	123.0	119.0	115.1	115.1
35°	3831.8	1963.5	317.3	226.1	170.5	138.8	119.0	111.1	107.1	103.1	103.1
37.5°	4077.7	1900.0	289.6	202.3	150.8	123.0	103.1	99.1	95.2	95.2	95.2
40°	4355.4	1820.6	269.8	182.5	134.8	107.1	91.2	87.3	83.3	83.3	83.3
42.5°	4648.9	1729.5	249.9	162.6	119.0	91.2	79.4	79.4	75.4	75.4	71.4
45°	4978.1	1638.3	230.1	142.8	103.1	79.4	67.4	63.4	63.4	59.5	59.5
47.5°	5366.9	1554.9	210.2	126.9	91.2	67.4	59.5	55.5	51.6	47.6	47.6
50°	5914.3	1547.0	186.4	111.1	83.3	55.5	47.6	43.7	39.7	35.7	35.7
52.5°	6457.7	1475.6	158.7	91.2	67.4	47.6	35.7	31.7	27.7	27.7	23.8
55°	6580.6	1356.6	138.8	79.4	51.6	35.7	27.7	19.8	19.8	15.9	15.9
57.5°	6850.4	1301.1	119.0	63.4	39.7	27.7	15.9	11.9	11.9	11.9	11.9
60°	7381.9	1285.2	103.1	55.5	27.7	19.8	11.9	8.0	8.0	4.0	4.0
62.5°	8115.8	1269.3	87.3	47.6	19.8	11.9	8.0	4.0	0.0	0.0	0.0
65°	8520.4	1162.2	71.4	35.7	15.9	11.9	4.0	0.0	0.0	0.0	0.0
67.5°	8413.3	959.9	63.4	23.8	11.9	8.0	4.0	0.0	0.0	0.0	0.0
69°	7965.0	809.2	51.6	19.8	11.9	8.0	4.0	0.0	0.0	0.0	0.0
70°	7425.5	698.2	47.6	15.9	8.0	4.0	4.0	0.0	0.0	0.0	0.0
72.5°	5271.7	364.9	31.7	11.9	8.0	4.0	0.0	0.0	0.0	0.0	0.0
75°	2463.3	162.6	19.8	8.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0
77.5°	543.4	75.4	11.9	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	103.1	27.7	8.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.7	11.9	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	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)