

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: P258083

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258083
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-AF72-270-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1155mA 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: 20994 lumens
Efficiency: N/A
Efficacy: 76.9 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 - G3

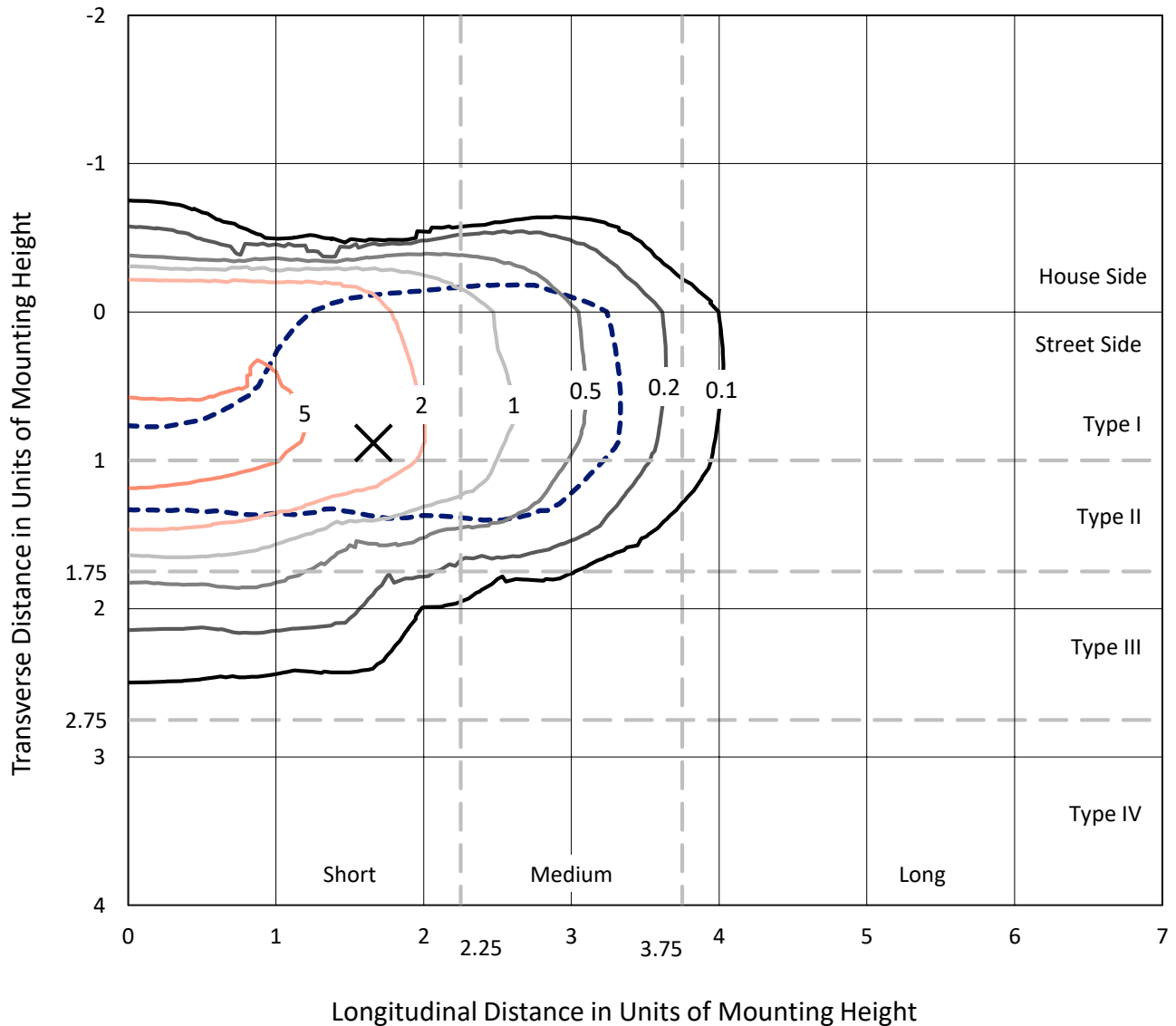
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

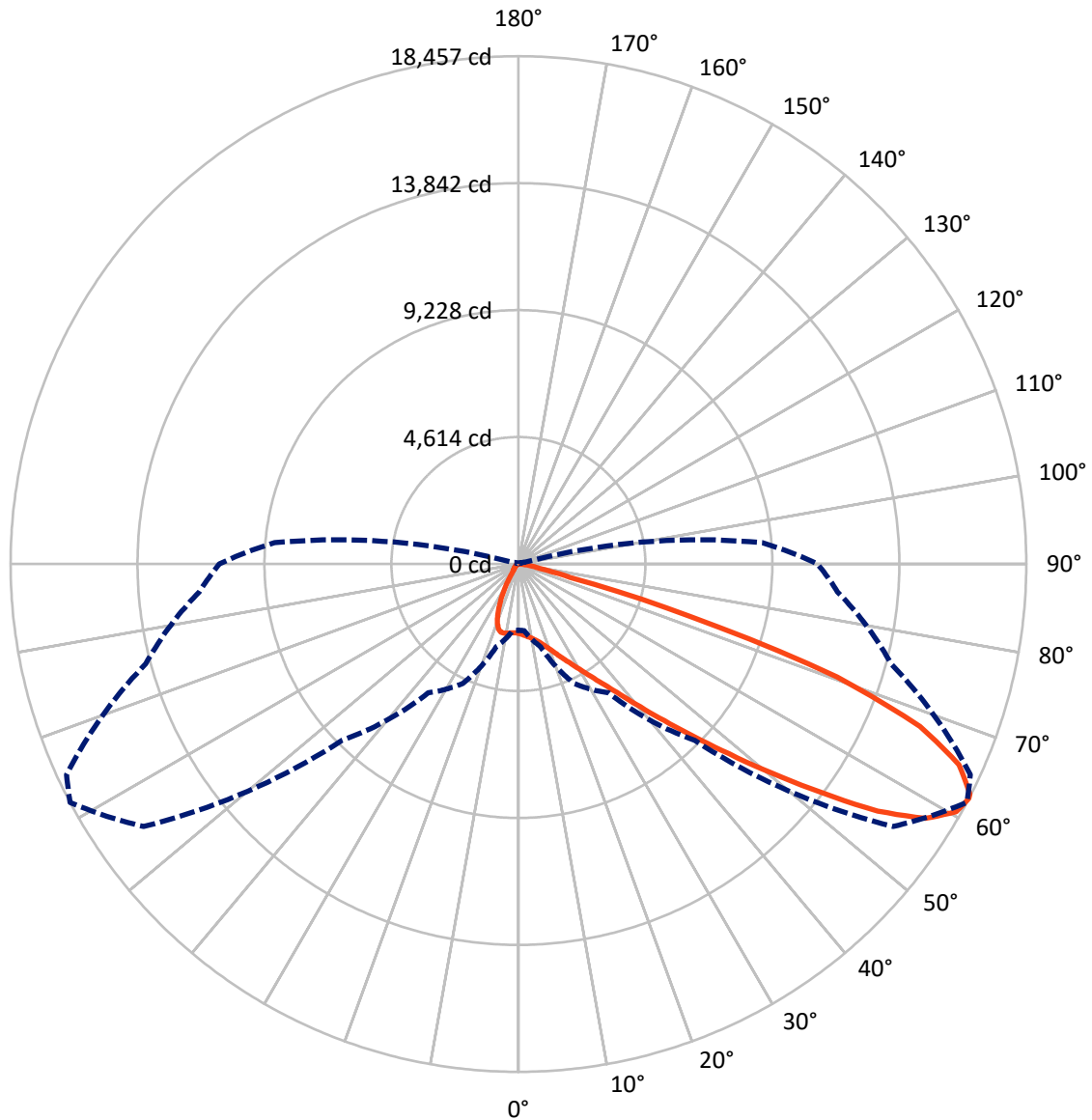
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type II - 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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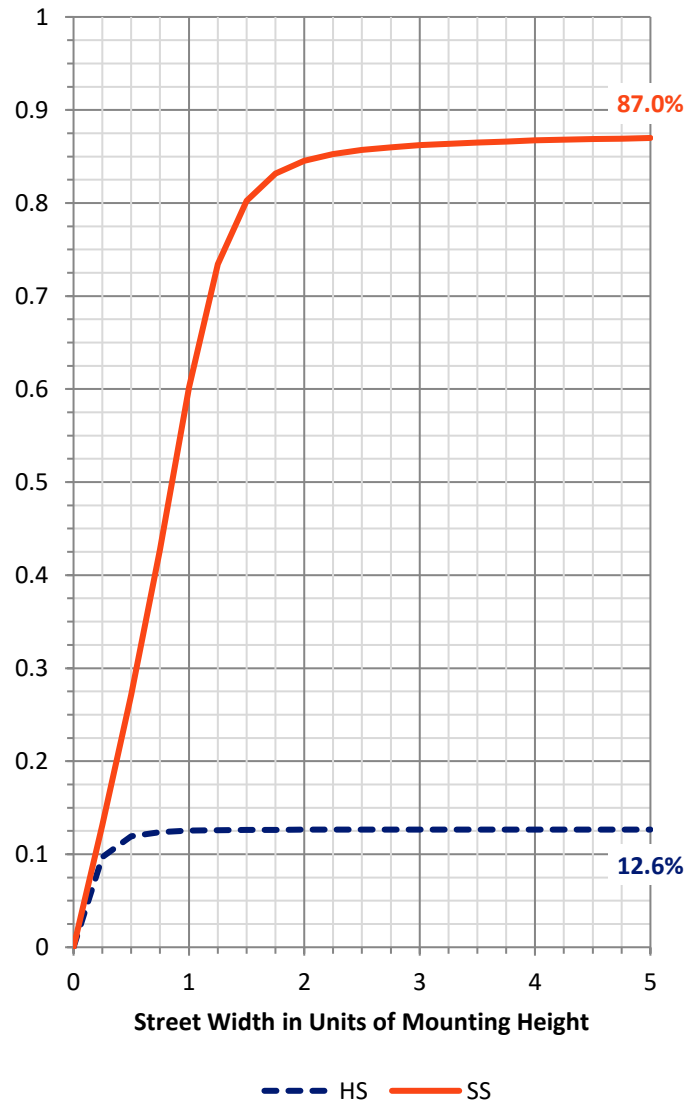
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2684.3	0.0	2684.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	18309.7	0.0	18309.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	20994.0	0.0	20994.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.4	1.2
10°-20°	679.6	3.2
20°-30°	1141.4	5.4
30°-40°	2188.0	10.4
40°-50°	4469.1	21.3
50°-60°	5914.1	28.2
60°-70°	4594.3	21.9
70°-80°	1658.3	7.9
80°-90°	105.7	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°	20994.0	100.0
0°-180°	20994.0	100.0



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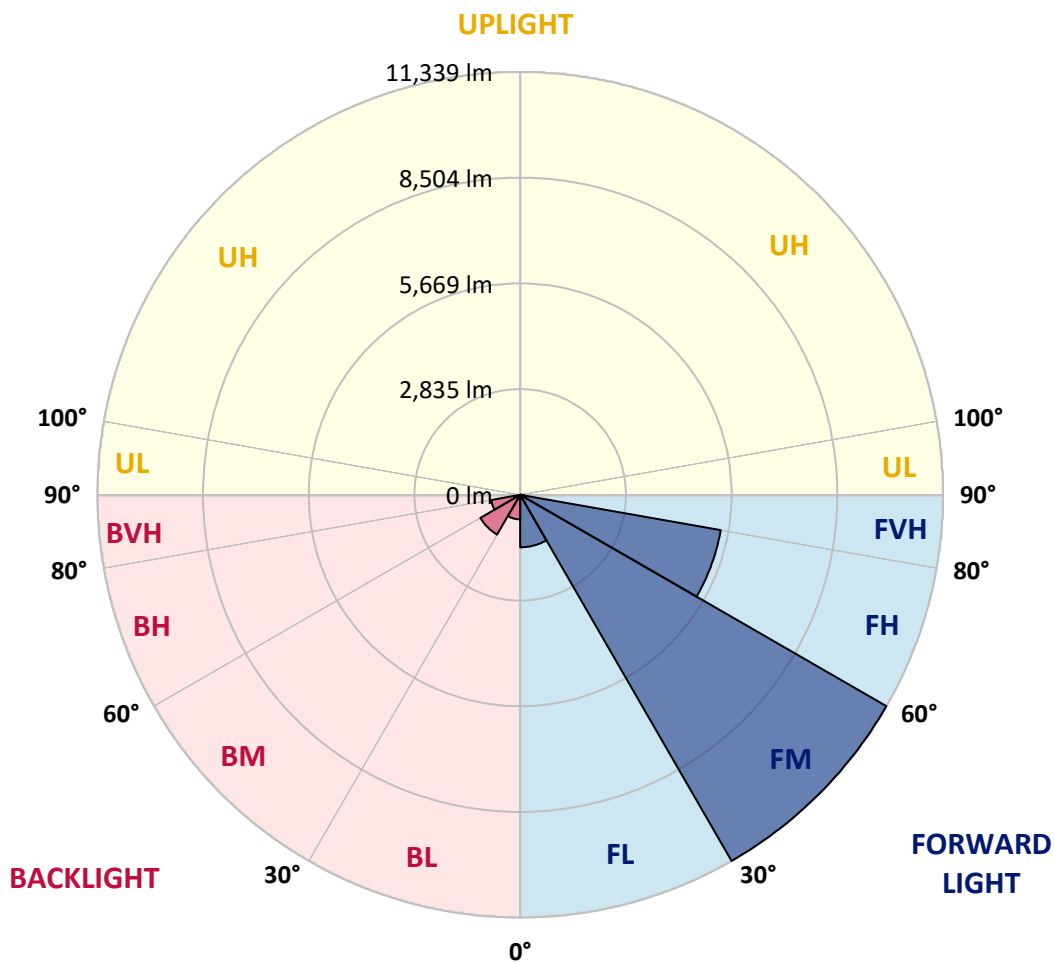
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1407.5	6.7			
FM	(30°-60°)	11338.9	54.0			
FH	(60°-80°)	5462.2	26.0			G3/7500
FVH	(80°-90°)	101.1	0.5			G2/225
BL	(0°-30°)	657.0	3.1	B2/1000		
BM	(30°-60°)	1232.3	5.9	B2/2500		
BH	(60°-80°)	790.4	3.8	B2/1000		G2/1000
BVH	(80°-90°)	4.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0
2.5°	2596.1	2590.9	2585.8	2580.6	2580.6	2575.5	2570.3	2559.9	2549.6	2539.4	2534.2
5°	2642.6	2637.4	2632.3	2637.4	2632.3	2632.3	2627.0	2616.7	2606.4	2590.9	2575.5
7.5°	2678.7	2673.5	2668.4	2673.5	2678.7	2683.8	2689.0	2678.7	2673.5	2652.9	2637.4
10°	2725.1	2719.9	2714.8	2725.1	2725.1	2750.9	2756.1	2750.9	2745.8	2730.3	2704.5
12.5°	2792.2	2797.4	2797.4	2807.7	2818.0	2849.0	2859.4	2843.8	2843.8	2823.2	2792.2
15°	2916.1	2916.1	2916.1	2926.5	2931.6	2972.9	2983.2	2967.7	2978.0	2941.9	2910.9
17.5°	3034.8	3040.0	3050.3	3070.9	3070.9	3107.1	3127.7	3127.7	3148.3	3101.9	3060.6
20°	3153.6	3158.7	3174.1	3220.7	3220.7	3267.1	3303.2	3318.7	3339.3	3292.9	3220.7
22.5°	3282.5	3282.5	3308.3	3380.6	3365.1	3458.0	3525.1	3551.0	3571.5	3509.6	3396.1
25°	3478.6	3458.0	3478.6	3545.8	3535.4	3664.5	3788.3	3814.2	3840.0	3767.7	3597.4
27.5°	3850.3	3819.3	3747.1	3752.2	3752.2	3901.8	4077.4	4113.5	4128.9	4067.0	3855.4
30°	4593.5	4593.5	4325.1	4144.5	4025.7	4159.9	4407.7	4469.6	4490.2	4397.4	4118.7
32.5°	5888.9	5888.9	5393.5	4934.1	4485.1	4485.1	4769.0	4882.5	4903.2	4794.8	4469.6
35°	7540.6	7530.2	6787.0	6157.3	5280.0	4949.6	5192.2	5383.2	5445.1	5300.6	4923.8
37.5°	9295.3	9228.2	8428.3	7705.7	6503.1	5692.8	5765.1	6018.0	6074.8	5956.0	5512.2
40°	10719.9	10642.5	9997.3	9393.5	8082.5	6880.0	6590.9	6823.2	6890.3	6725.1	6214.1
42.5°	12010.2	11819.2	11375.3	10941.8	9899.2	8934.0	7690.2	7783.1	7855.4	7679.9	7003.8
45°	12944.3	12650.2	12423.1	12288.9	11736.6	11189.5	9114.7	8928.9	8954.7	8737.9	7865.7
47.5°	12970.2	12763.8	12784.3	13135.3	13362.4	13341.7	10967.6	10306.9	10208.9	9847.6	8784.4
50°	11731.5	11850.2	12226.9	13228.2	14456.6	15199.8	13171.4	11937.9	11643.7	10993.4	9698.0
52.5°	9667.0	9852.8	10559.9	12247.6	14616.6	16423.1	15457.9	13801.1	13274.7	12128.9	10399.9
55°	7571.6	7581.8	8325.1	10043.7	13548.3	16644.9	17285.0	15850.1	15044.9	12990.9	10864.4
57.5°	5207.6	5491.5	6436.1	7592.1	11137.9	15540.5	17971.4	17439.8	16402.4	13522.4	11189.5
60°	3411.5	3427.1	4526.4	5863.1	7581.8	12645.0	17553.3	18281.1	17501.8	13837.3	11411.5
62°	2405.2	2430.9	3112.2	4789.7	5713.5	9063.1	16629.5	18456.6	18121.1	14023.0	11643.7
62.5°	2229.6	2250.3	2823.2	4521.2	5367.7	8129.0	16299.2	18415.3	18213.9	14085.0	11726.3
65°	1636.1	1636.1	1847.8	3107.1	3932.8	4392.2	13811.5	17594.7	18090.1	14580.5	12036.0
67.5°	1264.5	1274.8	1347.1	1914.9	2967.7	2663.2	8815.4	15746.9	16799.8	15313.4	12211.5
70°	1089.0	1083.8	1135.5	1269.7	2142.0	1770.3	3881.3	12288.9	14069.6	15127.6	12051.5
72.5°	805.2	810.3	929.0	1114.8	1491.6	1150.9	1754.8	6523.8	9125.0	11839.8	10327.6
75°	516.1	521.3	655.5	877.4	1073.6	753.5	1011.6	1945.8	3736.7	6565.1	6317.3
77.5°	345.8	356.1	428.4	614.2	939.4	469.6	634.8	815.5	1125.1	2461.9	2265.7
80°	232.2	232.2	273.5	412.9	593.5	392.3	340.6	542.0	583.2	763.8	382.0
82.5°	154.9	154.9	180.7	273.5	387.1	351.0	206.4	294.2	340.6	382.0	134.2
85°	92.9	92.9	123.9	170.3	252.9	196.1	134.2	165.2	175.4	242.5	72.2
87.5°	56.8	51.7	82.6	118.7	134.2	118.7	87.8	87.8	92.9	134.2	36.1
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°	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0
2.5°	2523.8	2518.7	2513.5	2503.2	2487.7	2477.4	2467.1	2456.7	2446.4	2446.4	2461.9
5°	2570.3	2554.8	2534.2	2513.5	2482.6	2461.9	2446.4	2425.8	2415.5	2415.5	2420.6
7.5°	2627.0	2611.6	2575.5	2539.4	2492.8	2456.7	2420.6	2374.2	2338.1	2322.5	2338.1
10°	2689.0	2668.4	2616.7	2559.9	2508.4	2415.5	2296.7	2152.2	2028.4	1971.6	1997.4
12.5°	2766.5	2740.6	2678.7	2601.3	2482.6	2255.5	1961.3	1625.8	1414.1	1316.1	1336.8
15°	2880.0	2843.8	2756.1	2637.4	2374.2	1883.9	1403.9	1016.8	820.6	738.1	748.4
17.5°	3014.1	2967.7	2849.0	2627.0	2095.4	1357.4	836.2	593.5	511.0	490.3	490.3
20°	3158.7	3096.8	2941.9	2549.6	1672.2	851.6	521.3	454.2	423.2	407.7	407.7
22.5°	3308.3	3225.8	3019.3	2369.1	1192.2	531.6	428.4	382.0	345.8	330.3	330.3
25°	3489.0	3380.6	3096.8	2054.2	758.7	428.4	366.4	320.0	283.9	263.2	268.4
27.5°	3700.6	3561.2	3163.9	1661.9	490.3	371.6	304.5	258.1	227.1	216.8	216.8
30°	3922.5	3757.4	3179.3	1243.8	397.4	320.0	252.9	211.6	191.0	180.7	180.7
32.5°	4227.0	4010.3	3132.9	825.8	335.5	268.4	211.6	175.4	160.0	154.9	154.9
35°	4629.7	4340.6	3024.5	511.0	283.9	222.0	175.4	154.9	139.3	134.2	134.2
37.5°	5140.6	4800.0	2833.5	351.0	242.5	180.7	149.7	134.2	123.9	118.7	118.7
40°	5821.9	5357.4	2585.8	304.5	206.4	154.9	129.0	118.7	108.4	108.4	108.4
42.5°	6544.4	6033.5	2265.7	268.4	175.4	134.2	113.5	103.2	98.1	92.9	92.9
45°	7334.1	6725.1	1868.3	237.4	149.7	118.7	103.2	87.8	82.6	82.6	82.6
47.5°	8118.6	7437.4	1434.8	206.4	129.0	103.2	87.8	77.4	72.2	67.1	67.1
50°	8923.8	8082.5	1052.9	180.7	113.5	92.9	77.4	67.1	56.8	51.7	51.7
52.5°	9507.0	8469.6	769.1	154.9	98.1	77.4	61.9	51.7	41.3	36.1	36.1
55°	9935.4	8706.9	562.6	129.0	87.8	67.1	51.7	41.3	31.0	31.0	25.8
57.5°	10270.8	8820.5	423.2	113.5	77.4	56.8	41.3	31.0	25.8	20.7	20.7
60°	10528.9	8825.7	314.9	92.9	67.1	46.4	31.0	20.7	15.4	15.4	15.4
62°	10869.6	8892.8	258.1	77.4	61.9	41.3	25.8	15.4	10.3	5.1	5.1
62.5°	10967.6	8918.6	247.8	77.4	56.8	36.1	20.7	15.4	10.3	5.1	5.1
65°	11421.8	8965.0	191.0	61.9	46.4	31.0	15.4	10.3	0.0	0.0	0.0
67.5°	11834.7	8892.8	139.3	46.4	36.1	20.7	15.4	5.1	0.0	0.0	0.0
70°	11793.4	8397.3	98.1	31.0	25.8	15.4	10.3	0.0	0.0	0.0	0.0
72.5°	9718.6	6286.3	67.1	25.8	15.4	10.3	5.1	0.0	0.0	0.0	0.0
75°	5868.4	2750.9	46.4	15.4	15.4	10.3	5.1	0.0	0.0	0.0	0.0
77.5°	1925.1	996.1	31.0	10.3	10.3	5.1	5.1	0.0	0.0	0.0	0.0
80°	314.9	165.2	15.4	10.3	10.3	5.1	5.1	0.0	0.0	0.0	0.0
82.5°	98.1	41.3	10.3	10.3	5.1	5.1	0.0	0.0	0.0	0.0	0.0
85°	36.1	15.4	10.3	10.3	5.1	5.1	0.0	0.0	0.0	0.0	0.0
87.5°	15.4	10.3	10.3	10.3	5.1	5.1	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)