

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: P236973

Luminaire Tested: **ARCH-L-AF72-200-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236973
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-AF72-200-D-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 860mA 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: 19935.3 lumens
Efficiency: N/A
Efficacy: 99.2 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

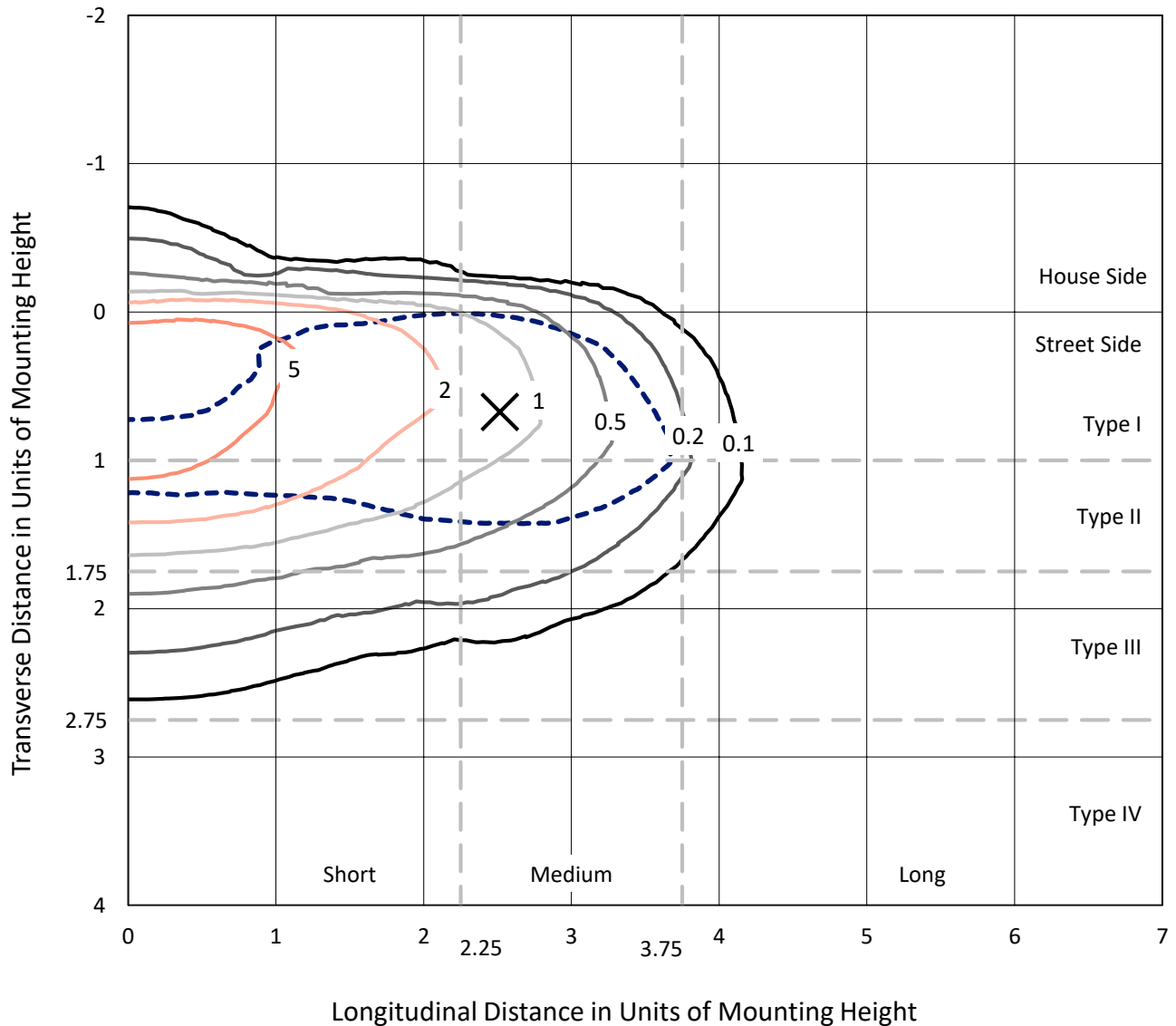
Input Watts (W): 201
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

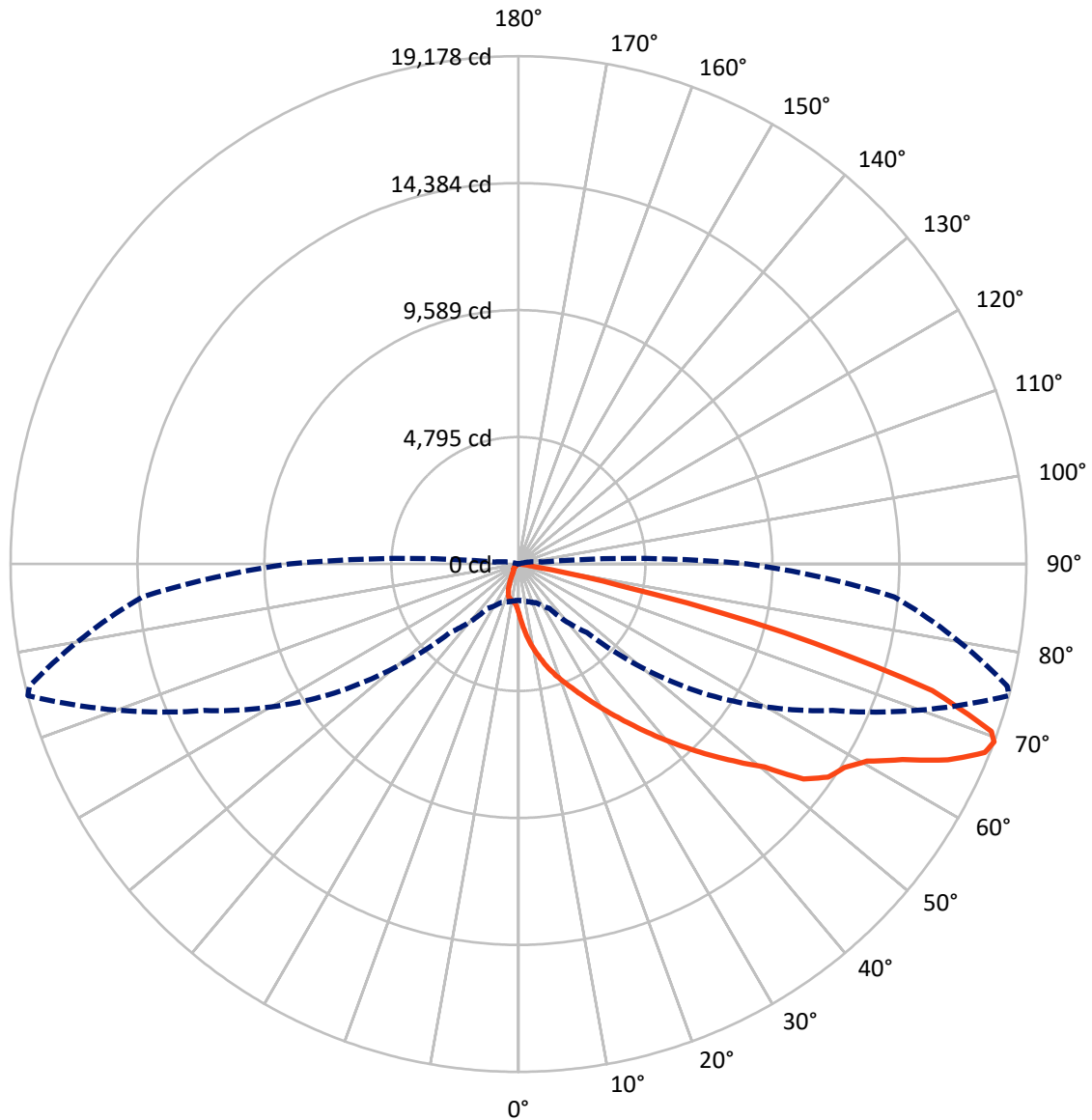
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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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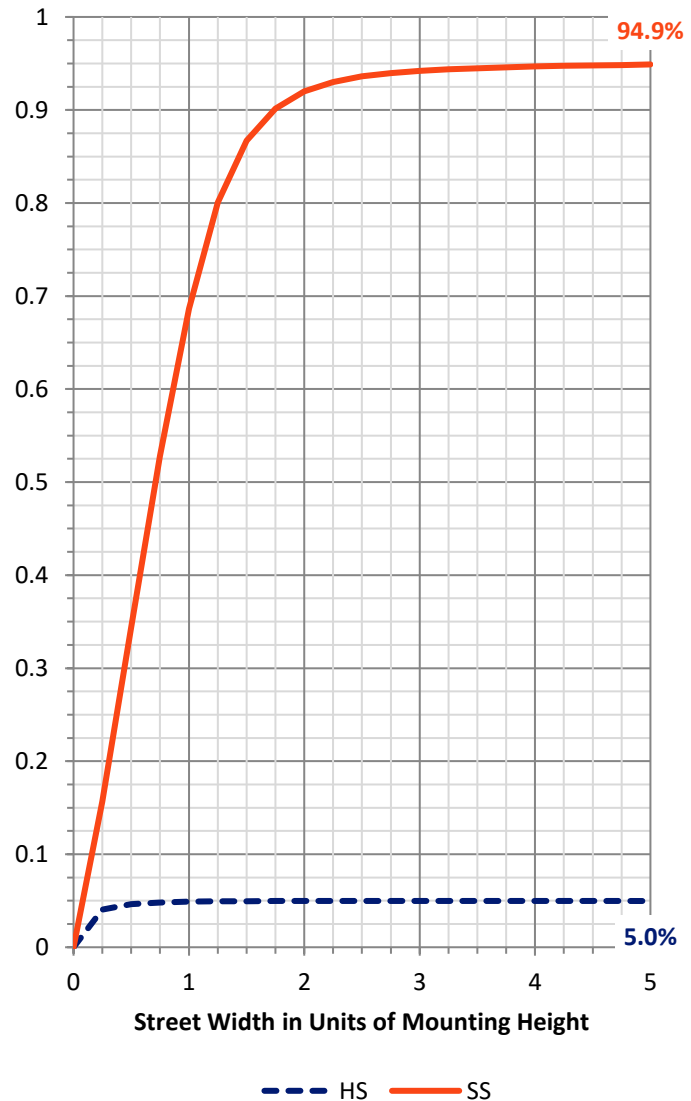
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	994.6	0.0	994.6
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	18940.6	0.0	18940.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	19935.3	0.0	19935.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.3	1.1
10°-20°	773.3	3.9
20°-30°	1476.3	7.4
30°-40°	2648.1	13.3
40°-50°	4057.1	20.4
50°-60°	4715.4	23.7
60°-70°	4175.5	20.9
70°-80°	1801.1	9.0
80°-90°	72.2	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°	19935.3	100.0
0°-180°	19935.3	100.0

Coefficient of Utilization



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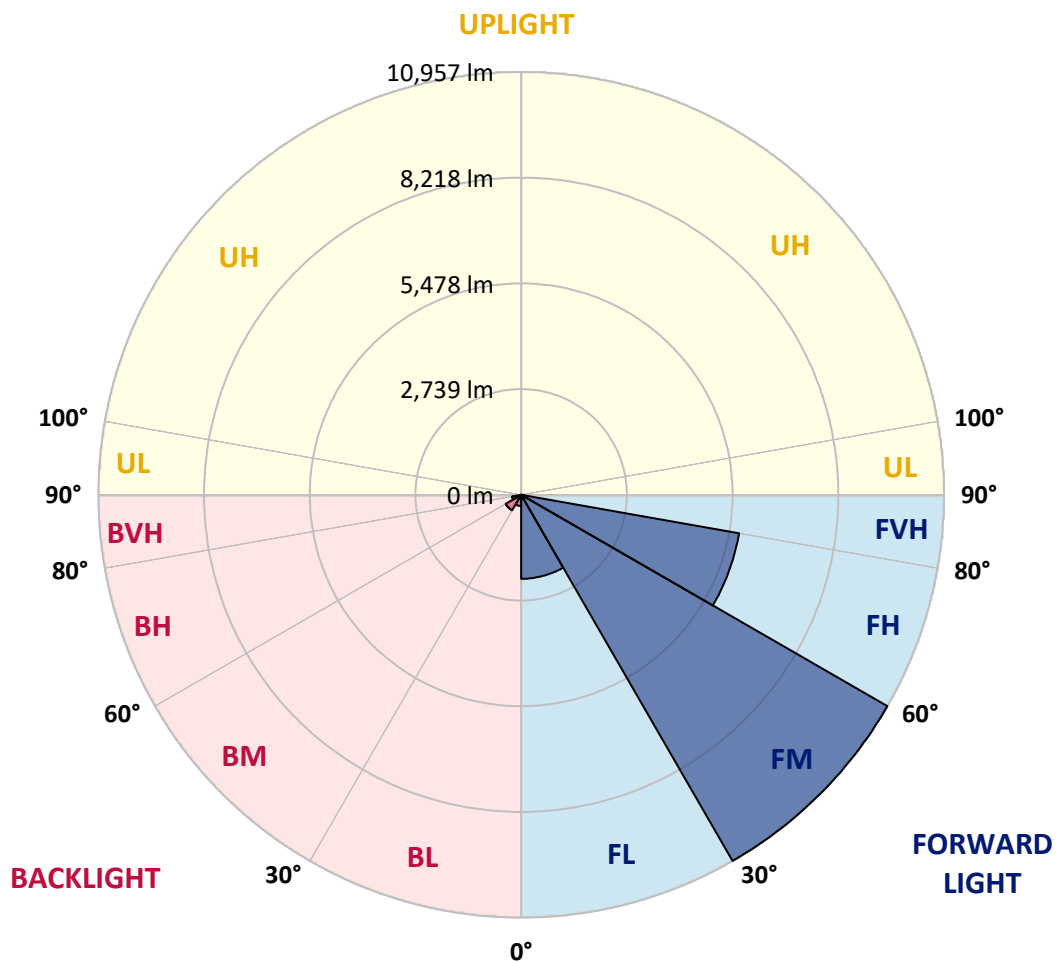
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2177.0	10.9			
FM	(30°-60°)	10956.9	55.0			
FH	(60°-80°)	5735.6	28.8			G3/7500
FVH	(80°-90°)	71.1	0.4			G1/100
BL	(0°-30°)	288.9	1.4	B1/500		
BM	(30°-60°)	463.7	2.3	B1/1000		
BH	(60°-80°)	241.0	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°	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0
2.5°	3055.8	3025.6	2995.5	2961.0	2883.6	2750.2	2582.3	2401.6	2177.8	2139.0	1958.2
5°	3709.9	3697.0	3666.9	3619.5	3533.5	3387.2	3197.7	2931.0	2556.5	2491.9	2108.9
7.5°	4170.5	4161.9	4136.0	4080.0	4002.6	3856.3	3658.3	3369.9	2935.3	2862.1	2298.3
10°	4583.6	4579.3	4557.8	4506.2	4428.7	4269.5	4058.6	3757.3	3296.8	3215.0	2517.8
12.5°	4958.0	4962.3	4953.7	4928.0	4872.0	4721.3	4480.3	4153.3	3645.4	3555.0	2780.3
15°	5177.6	5190.5	5224.9	5276.6	5293.8	5173.3	4923.7	4562.1	4002.6	3925.2	3081.5
17.5°	5104.4	5117.3	5224.9	5401.4	5569.3	5586.4	5362.6	4949.4	4355.5	4278.1	3378.5
20°	4928.0	4945.1	5057.1	5298.1	5625.2	5853.2	5762.9	5371.2	4691.3	4596.5	3662.6
22.5°	5125.9	5125.9	5160.4	5306.7	5603.6	5960.8	6081.3	5793.0	5035.6	4919.4	3946.6
25°	5806.0	5793.0	5719.8	5659.6	5754.3	6072.7	6322.3	6223.4	5440.1	5306.7	4247.9
27.5°	6666.7	6726.9	6589.2	6369.7	6154.6	6292.3	6537.6	6649.5	5887.7	5750.0	4557.8
30°	7630.8	7656.6	7493.0	7200.3	6821.6	6688.3	6791.5	7015.3	6374.0	6223.4	4880.6
32.5°	8500.1	8478.6	8340.9	8035.4	7566.3	7277.9	7118.6	7308.0	6903.4	6731.2	5212.0
35°	9270.5	9287.8	9119.9	8767.0	8306.5	8000.9	7622.1	7639.4	7497.3	7299.4	5595.0
37.5°	9963.4	9933.4	9774.1	9421.2	9003.7	8672.3	8272.1	7983.7	8147.2	7940.7	6025.4
40°	10527.3	10497.1	10329.2	9985.0	9593.3	9322.2	9008.0	8444.2	8831.5	8594.8	6485.9
42.5°	10974.8	10940.5	10798.4	10467.0	10088.2	9847.2	9696.7	9012.3	9563.2	9326.4	7002.4
45°	11194.4	11164.3	11078.1	10828.5	10497.1	10286.3	10359.4	9666.5	10346.5	10148.5	7570.6
47.5°	10936.2	10923.3	11022.2	10979.2	10789.8	10677.9	10931.9	10380.9	11168.6	10974.8	8224.7
50°	10152.8	10174.4	10462.7	10820.0	10910.3	11043.8	11401.0	11134.1	12050.9	11844.2	8977.9
52.5°	8220.4	8366.7	9236.1	10096.9	10764.0	11267.5	11951.9	12210.0	13488.3	13286.1	10152.8
55°	6137.3	6197.5	7144.4	8616.3	10174.4	11250.3	12360.7	12842.7	14198.5	13991.9	10462.7
57.5°	4867.7	4889.2	5358.3	6860.4	8960.6	10863.0	12576.0	13070.9	14508.3	14336.2	10923.3
60°	3821.8	3847.6	4187.7	5220.6	7252.0	9817.2	12266.0	13268.8	15115.2	14977.4	11728.0
62.5°	2974.0	2999.8	3206.3	3813.3	5440.1	8207.4	11642.0	13587.3	16268.6	16204.1	13045.1
65°	2302.6	2311.2	2453.2	2737.2	3843.3	6464.4	10880.2	13884.3	17826.7	17770.7	14112.4
67.5°	1700.0	1712.9	1812.0	1988.4	2595.2	4643.9	9632.1	13656.2	19001.6	18838.0	14499.7
69°	1372.9	1385.9	1471.9	1613.9	2048.7	3658.3	8491.5	13092.3	19178.1	19023.1	14254.4
70°	1175.0	1183.6	1269.7	1390.2	1747.4	3107.4	7587.7	12606.0	18945.7	18795.0	13695.0
72.5°	753.2	796.3	882.3	959.7	1157.8	2057.3	5121.6	10454.1	16346.1	16087.8	10725.2
75°	417.5	430.4	585.3	680.1	770.4	1338.5	2849.1	6520.4	10398.2	10217.4	5737.0
77.5°	344.3	352.9	413.2	516.5	516.5	748.9	1075.9	2569.4	3955.2	3568.0	1553.7
80°	241.0	249.6	314.1	340.0	370.1	421.8	348.6	563.9	611.1	542.3	232.4
82.5°	167.9	176.5	215.2	279.8	297.0	197.9	129.1	167.9	176.5	176.5	90.4
85°	30.2	43.1	159.3	232.4	176.5	60.3	73.1	60.3	56.0	60.3	21.5
87.5°	0.0	0.0	99.0	111.9	94.7	25.8	30.2	21.5	12.9	17.2	8.6
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°	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0	1855.0
2.5°	1867.9	1777.5	1622.6	1510.7	1416.0	1342.8	1312.7	1265.3	1230.9	1248.1	1226.6
5°	1919.6	1760.3	1510.7	1351.4	1239.5	1144.8	1067.3	1007.1	959.7	951.1	942.5
7.5°	2001.3	1773.2	1446.1	1248.1	1080.2	934.0	813.5	723.0	654.2	654.2	628.4
10°	2113.2	1807.7	1407.4	1144.8	895.2	697.2	576.7	490.6	456.2	451.9	443.3
12.5°	2268.2	1872.2	1377.2	1011.4	697.2	507.9	434.7	404.6	391.7	387.4	383.1
15°	2479.0	1966.8	1342.8	847.8	529.4	417.5	387.4	361.5	348.6	344.3	340.0
17.5°	2681.4	2053.0	1269.7	680.1	430.4	378.7	344.3	322.7	305.6	301.3	301.3
20°	2870.7	2126.1	1144.8	529.4	387.4	340.0	305.6	279.8	262.5	258.2	258.2
22.5°	3068.6	2186.4	989.9	430.4	352.9	301.3	266.9	241.0	223.8	219.5	215.2
25°	3279.6	2229.4	813.5	383.1	318.4	266.9	228.1	206.6	193.6	189.3	185.1
27.5°	3507.7	2246.6	645.6	348.6	279.8	232.4	197.9	176.5	167.9	163.6	163.6
30°	3714.2	2229.4	499.2	309.9	245.3	202.2	172.2	155.0	146.3	142.0	142.0
32.5°	3929.5	2186.4	400.3	275.5	215.2	172.2	146.3	133.4	129.1	124.8	124.8
35°	4157.6	2130.4	344.3	245.3	185.1	150.7	129.1	120.5	116.2	111.9	111.9
37.5°	4424.4	2061.6	314.1	219.5	163.6	133.4	111.9	107.6	103.3	103.3	103.3
40°	4725.6	1975.5	292.7	197.9	146.3	116.2	99.0	94.7	90.4	90.4	90.4
42.5°	5044.2	1876.5	271.2	176.5	129.1	99.0	86.0	86.0	81.7	81.7	77.4
45°	5401.4	1777.5	249.6	155.0	111.9	86.0	73.1	68.8	68.8	64.5	64.5
47.5°	5823.1	1687.2	228.1	137.7	99.0	73.1	64.5	60.3	56.0	51.7	51.7
50°	6417.1	1678.6	202.2	120.5	90.4	60.3	51.7	47.4	43.1	38.8	38.8
52.5°	7006.7	1601.0	172.2	99.0	73.1	51.7	38.8	34.5	30.2	30.2	25.8
55°	7140.1	1471.9	150.7	86.0	56.0	38.8	30.2	21.5	21.5	17.2	17.2
57.5°	7432.8	1411.7	129.1	68.8	43.1	30.2	17.2	12.9	12.9	12.9	12.9
60°	8009.5	1394.5	111.9	60.3	30.2	21.5	12.9	8.6	8.6	4.3	4.3
62.5°	8805.8	1377.2	94.7	51.7	21.5	12.9	8.6	4.3	0.0	0.0	0.0
65°	9244.7	1261.0	77.4	38.8	17.2	12.9	4.3	0.0	0.0	0.0	0.0
67.5°	9128.5	1041.6	68.8	25.8	12.9	8.6	4.3	0.0	0.0	0.0	0.0
69°	8642.2	878.0	56.0	21.5	12.9	8.6	4.3	0.0	0.0	0.0	0.0
70°	8056.9	757.5	51.7	17.2	8.6	4.3	4.3	0.0	0.0	0.0	0.0
72.5°	5719.8	396.0	34.5	12.9	8.6	4.3	0.0	0.0	0.0	0.0	0.0
75°	2672.7	176.5	21.5	8.6	4.3	4.3	0.0	0.0	0.0	0.0	0.0
77.5°	589.6	81.7	12.9	8.6	4.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	111.9	30.2	8.6	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.8	12.9	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	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)