

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: P237203

Luminaire Tested: **ARCH-L-AF72-100-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237203
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10517 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

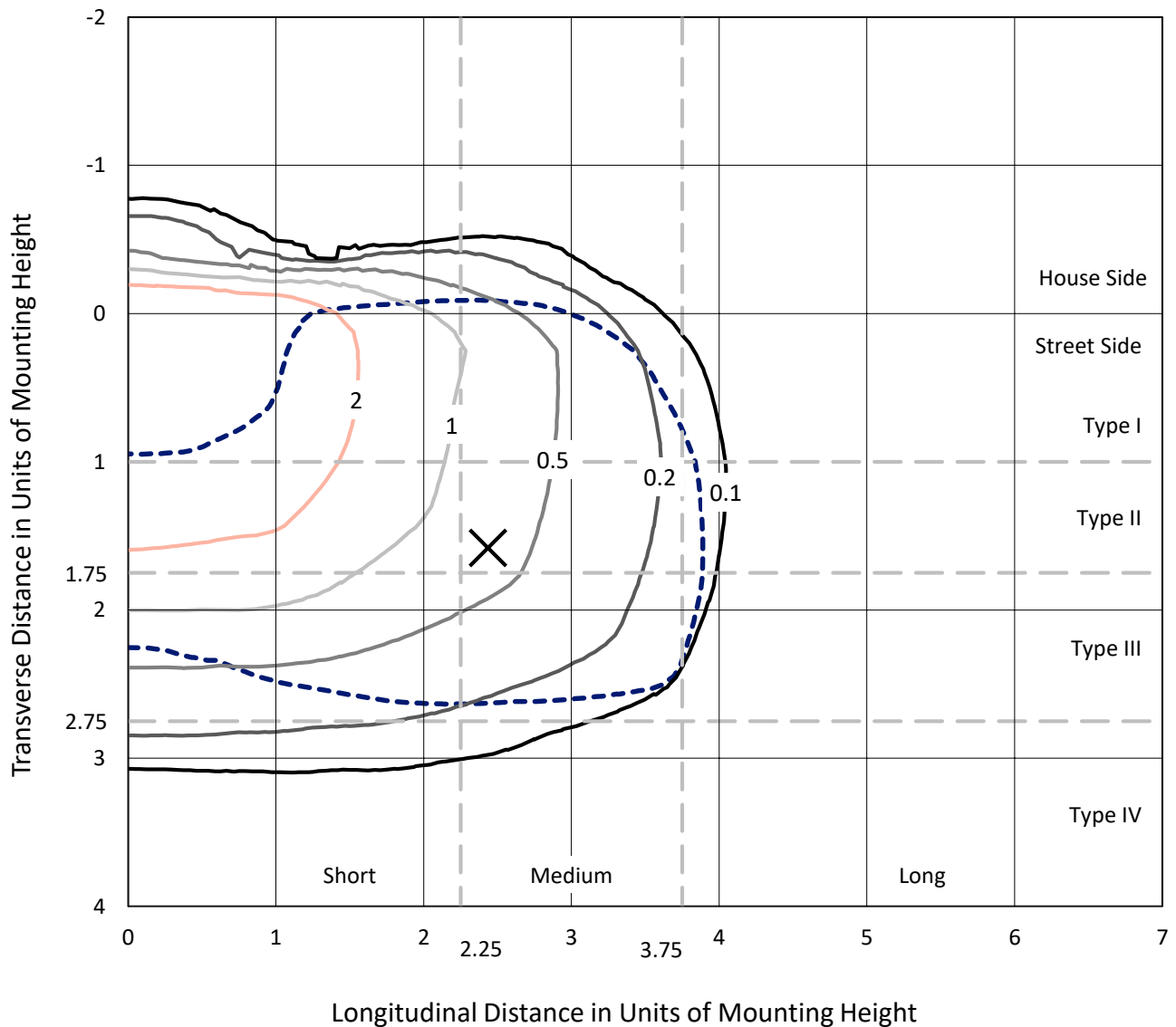
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

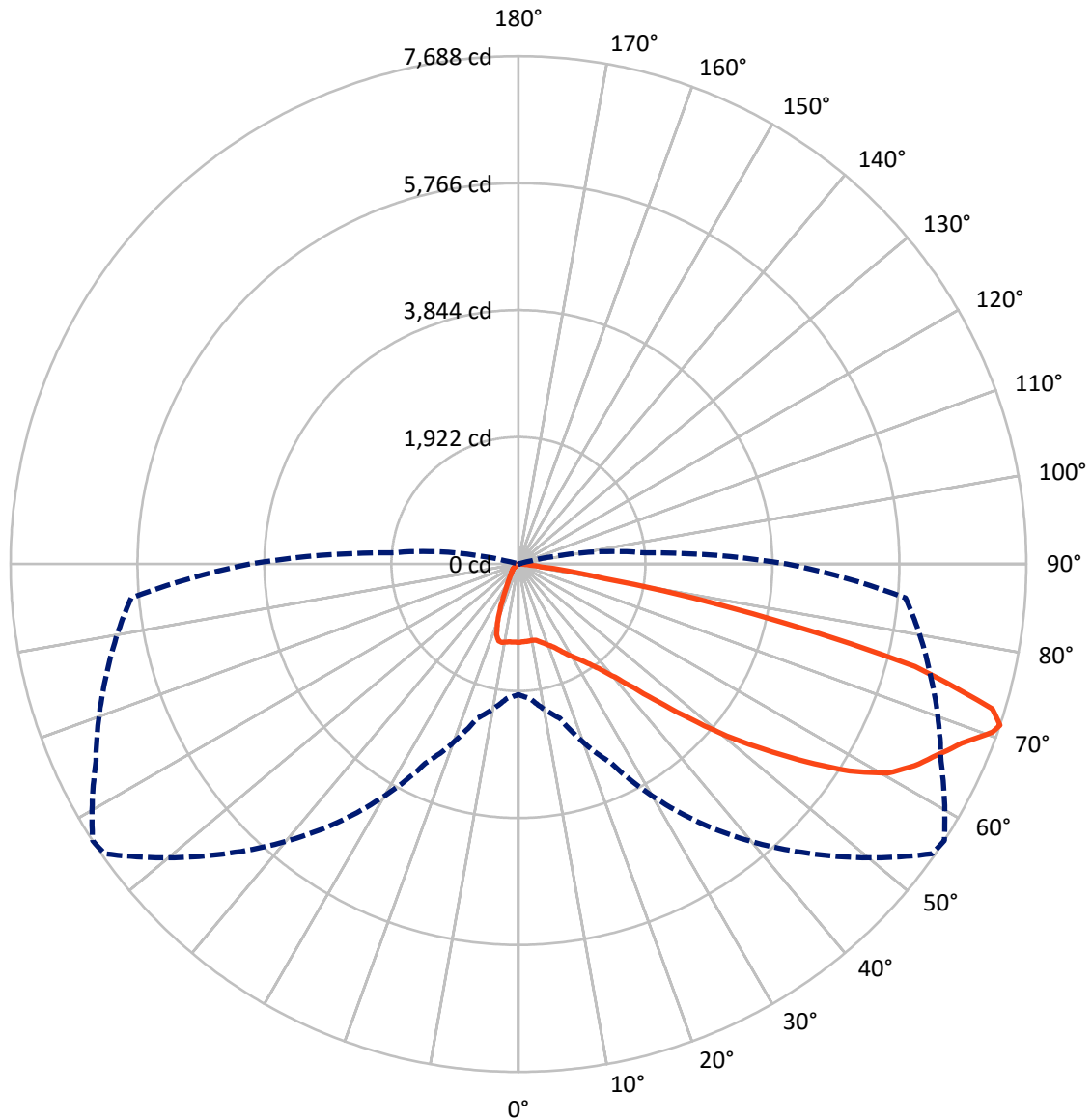


Based on 20 foot mounting height. Maximum calculated value = 3.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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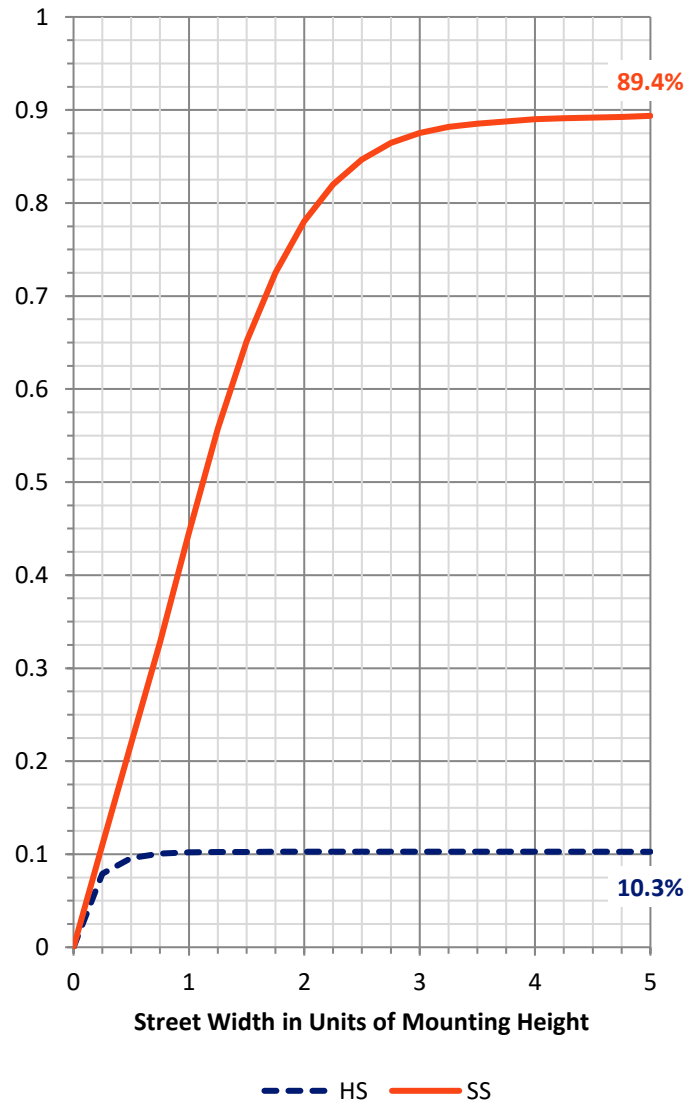
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1089.9	0.0	1089.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	9427.1	0.0	9427.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	10517.0	0.0	10517.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.6	1.1
10°-20°	298.5	2.8
20°-30°	465.6	4.4
30°-40°	786.9	7.5
40°-50°	1528.4	14.5
50°-60°	2566.7	24.4
60°-70°	3063.1	29.1
70°-80°	1614.3	15.3
80°-90°	82.0	0.8
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°	10517.0	100.0
0°-180°	10517.0	100.0



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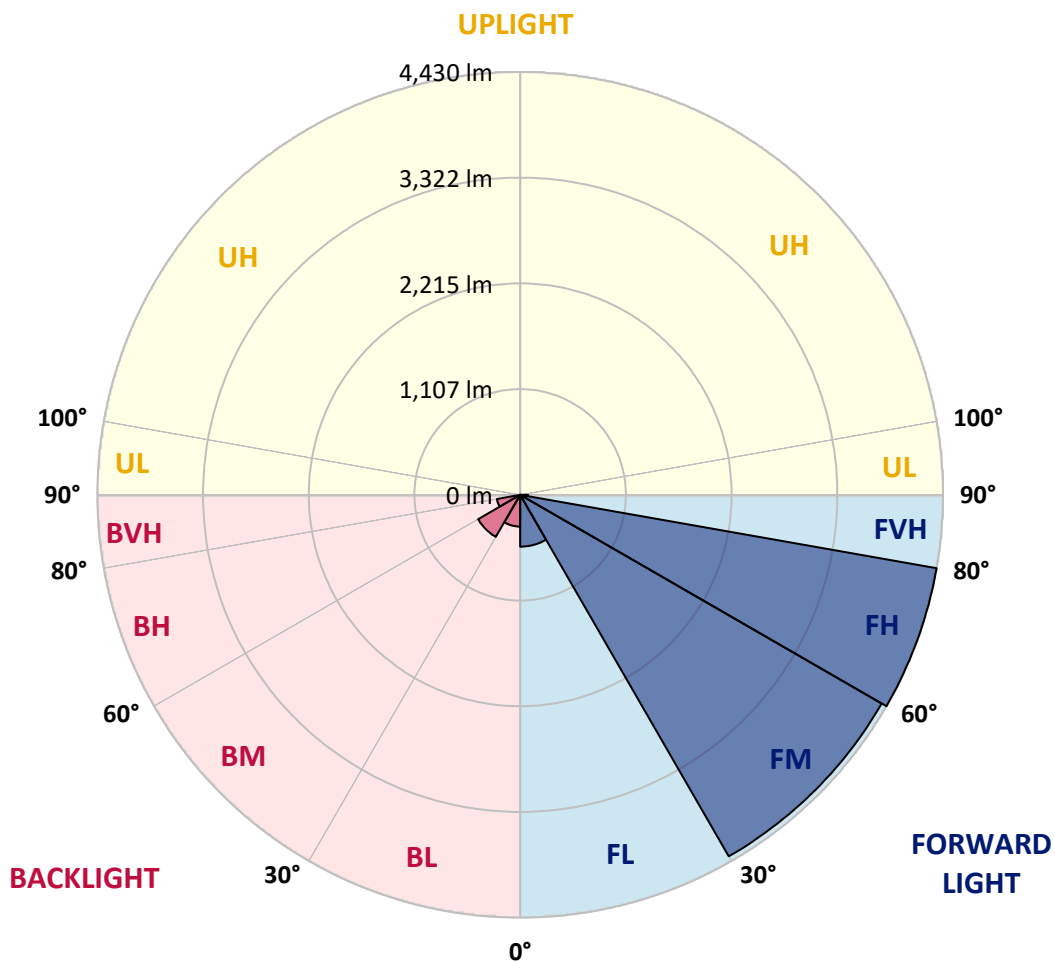
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	543.0	5.2			
FM	(30°-60°)	4373.0	41.6			
FH	(60°-80°)	4429.8	42.1			G2/5000
FVH	(80°-90°)	81.2	0.8			G1/100
BL	(0°-30°)	332.7	3.2	B1/500		
BM	(30°-60°)	508.9	4.8	B1/1000		
BH	(60°-80°)	247.5	2.4	B1/500		G1/500
BVH	(80°-90°)	0.8	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6
2.5°	1171.4	1171.4	1171.4	1173.8	1176.3	1176.3	1181.2	1178.7	1178.7	1178.7	1183.7
5°	1139.6	1142.0	1144.5	1149.4	1159.2	1166.5	1178.7	1178.7	1181.2	1186.1	1188.6
7.5°	1095.5	1097.9	1105.3	1115.0	1134.7	1151.8	1171.4	1176.3	1183.7	1195.9	1200.8
10°	1068.5	1073.4	1083.2	1095.5	1117.5	1139.6	1164.1	1171.4	1193.5	1215.6	1227.7
12.5°	1061.1	1063.6	1073.4	1093.0	1119.9	1146.9	1178.7	1186.1	1218.0	1252.3	1271.9
15°	1073.4	1075.8	1080.7	1102.8	1134.7	1168.9	1210.7	1220.5	1259.7	1298.8	1323.4
17.5°	1095.5	1095.5	1100.4	1119.9	1154.3	1193.5	1247.4	1262.1	1306.2	1350.3	1377.3
20°	1110.1	1110.1	1117.5	1137.1	1176.3	1227.7	1291.5	1311.1	1360.1	1409.1	1433.7
22.5°	1124.8	1127.3	1134.7	1156.8	1200.8	1271.9	1345.4	1365.0	1421.4	1472.8	1497.4
25°	1166.5	1164.1	1166.5	1186.1	1237.6	1325.8	1418.9	1443.5	1502.3	1558.7	1570.8
27.5°	1281.7	1276.8	1244.9	1232.7	1271.9	1382.2	1512.0	1536.6	1605.2	1661.6	1661.6
30°	1546.4	1536.6	1458.1	1357.7	1325.8	1433.7	1600.3	1634.6	1722.9	1771.9	1757.1
32.5°	1882.1	1860.0	1759.6	1588.0	1460.6	1502.3	1693.4	1732.7	1845.4	1887.0	1855.1
35°	2249.7	2247.2	2122.3	1901.8	1720.4	1644.4	1813.5	1860.0	2002.2	2038.9	1987.5
37.5°	2639.4	2649.1	2565.9	2261.9	2048.8	1877.2	1972.8	2026.7	2200.7	2244.9	2195.8
40°	3073.1	3070.7	3038.9	2678.6	2443.3	2208.0	2203.1	2252.1	2463.0	2531.5	2463.0
42.5°	3622.1	3617.2	3502.0	3178.5	2921.2	2639.4	2538.9	2556.0	2791.3	2904.1	2803.6
45°	4180.8	4146.5	4014.2	3734.8	3506.9	3173.6	2982.5	2982.5	3183.4	3337.8	3181.0
47.5°	4492.1	4457.8	4403.9	4249.4	4180.8	3808.3	3526.5	3492.3	3649.1	3805.9	3585.3
50°	4901.4	4901.4	4766.5	4707.7	4825.4	4563.2	4126.9	4092.6	4168.6	4293.5	4004.4
52.5°	5224.8	5166.0	5070.5	5121.9	5457.6	5337.6	4727.4	4661.2	4720.0	4751.8	4369.5
55°	5359.6	5303.3	5295.9	5484.7	6004.1	5837.5	5342.5	5283.6	5278.7	5121.9	4688.2
57.5°	5386.6	5337.6	5430.6	5761.6	6535.9	6246.8	5955.1	5911.0	5773.7	5381.6	5014.1
60°	5158.6	5183.2	5408.6	5913.5	6849.6	6602.1	6472.2	6425.7	6109.6	5602.2	5376.7
62.5°	4690.5	4749.4	5170.9	5928.2	6734.5	6746.7	6758.9	6727.1	6369.3	5803.2	5741.9
65°	4136.7	4153.9	4661.2	5724.7	6533.5	6702.6	6969.7	6967.2	6567.8	6028.7	6153.7
67.5°	3408.9	3438.3	3877.0	5038.5	6131.6	6682.9	7246.7	7239.3	6793.2	6285.9	6398.7
70°	2536.4	2573.2	2928.5	3918.6	5234.6	6437.9	7609.3	7614.2	7030.9	6482.0	6229.6
71°	1977.7	2043.9	2416.3	3328.0	4776.4	6190.4	7643.7	7687.8	7058.0	6455.0	5881.7
72.5°	970.5	1048.9	1516.9	2342.9	3930.9	5636.6	7418.1	7504.0	6888.9	6119.3	5028.8
75°	252.5	267.1	453.4	958.2	2107.6	3734.8	5982.1	6200.2	5631.7	4658.7	3073.1
77.5°	159.3	164.2	213.2	372.5	789.1	1418.9	3514.2	3622.1	3217.7	2359.9	1083.2
80°	112.7	115.2	134.8	240.2	460.7	414.2	1264.6	1311.1	1164.1	624.9	193.6
82.5°	68.6	68.6	98.0	154.4	284.3	225.5	333.3	355.4	313.6	174.0	63.7
85°	39.2	41.6	61.3	105.4	134.8	110.3	125.0	132.4	134.8	115.2	27.0
87.5°	31.8	34.3	53.9	88.2	73.6	53.9	53.9	56.4	58.8	68.6	12.3
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°	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6
2.5°	1183.7	1183.7	1186.1	1183.7	1183.7	1183.7	1186.1	1186.1	1186.1	1191.0	1193.5
5°	1188.6	1188.6	1188.6	1186.1	1183.7	1183.7	1188.6	1191.0	1191.0	1198.4	1198.4
7.5°	1200.8	1200.8	1195.9	1191.0	1186.1	1178.7	1181.2	1183.7	1181.2	1183.7	1183.7
10°	1227.7	1227.7	1220.5	1210.7	1195.9	1173.8	1144.5	1107.8	1073.4	1061.1	1056.2
12.5°	1271.9	1269.5	1254.8	1237.6	1205.8	1129.7	1019.5	889.6	781.7	752.4	742.6
15°	1320.9	1316.0	1298.8	1269.5	1183.7	982.7	752.4	585.7	482.8	458.3	453.4
17.5°	1372.4	1365.0	1340.5	1281.7	1083.2	730.3	485.2	367.6	311.3	306.4	308.8
20°	1426.3	1416.5	1382.2	1257.2	874.9	487.6	313.6	284.3	279.4	279.4	281.8
22.5°	1487.6	1475.3	1428.8	1168.9	637.2	323.5	269.5	267.1	264.6	262.2	262.2
25°	1558.7	1543.9	1472.8	1009.7	438.6	264.6	257.3	250.0	245.1	240.2	237.7
27.5°	1644.4	1624.8	1507.1	813.7	301.5	247.6	242.6	230.4	220.5	210.7	210.7
30°	1730.2	1705.7	1497.4	612.6	245.1	230.4	220.5	205.8	191.2	181.4	178.9
32.5°	1820.9	1796.3	1433.7	411.7	223.0	210.7	198.6	176.5	159.3	147.0	144.5
35°	1955.7	1936.0	1308.7	272.0	200.9	186.3	169.1	147.0	125.0	112.7	110.3
37.5°	2156.6	2132.0	1154.3	208.3	176.5	154.4	139.7	115.2	93.1	80.9	78.5
40°	2426.1	2352.7	970.5	183.8	154.4	127.5	107.8	83.4	66.2	58.8	58.8
42.5°	2739.9	2565.9	771.9	166.6	137.3	105.4	78.5	56.4	46.5	44.1	44.1
45°	3073.1	2764.3	573.5	154.4	120.1	83.4	56.4	39.2	34.3	31.8	31.8
47.5°	3416.2	2926.2	399.5	139.7	100.5	63.7	39.2	29.4	24.6	22.1	22.1
50°	3737.2	3031.5	281.8	125.0	85.7	46.5	29.4	22.1	17.2	17.2	17.2
52.5°	3960.3	3021.7	203.4	107.8	66.2	31.8	19.6	14.7	14.7	14.7	14.7
55°	4156.4	2984.9	159.3	93.1	51.5	22.1	14.7	12.3	12.3	9.8	9.8
57.5°	4323.0	2926.2	134.8	76.0	36.7	17.2	9.8	9.8	7.4	7.4	7.4
60°	4465.1	2852.6	112.7	63.7	24.6	12.3	7.4	4.9	4.9	2.5	4.9
62.5°	4658.7	2806.1	98.0	49.0	17.2	7.4	4.9	2.5	2.5	0.0	0.0
65°	4800.9	2717.8	83.4	34.3	9.8	4.9	2.5	2.5	0.0	0.0	0.0
67.5°	4805.7	2558.5	61.3	19.6	7.4	4.9	2.5	0.0	0.0	0.0	0.0
70°	4418.5	2181.1	39.2	9.8	4.9	2.5	2.5	0.0	0.0	0.0	0.0
71°	4063.3	1931.1	31.8	7.4	4.9	2.5	0.0	0.0	0.0	0.0	0.0
72.5°	3347.6	1418.9	24.6	7.4	2.5	2.5	0.0	0.0	0.0	0.0	0.0
75°	1845.4	514.6	12.3	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	590.7	156.8	7.4	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	100.5	24.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.3	9.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	2.5	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)