

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: P265818

Luminaire Tested: **ARCH-M-AF48-110-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265818
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-M-AF48-110-D-U-T2U-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 720mA 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: 8615.5 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 111
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

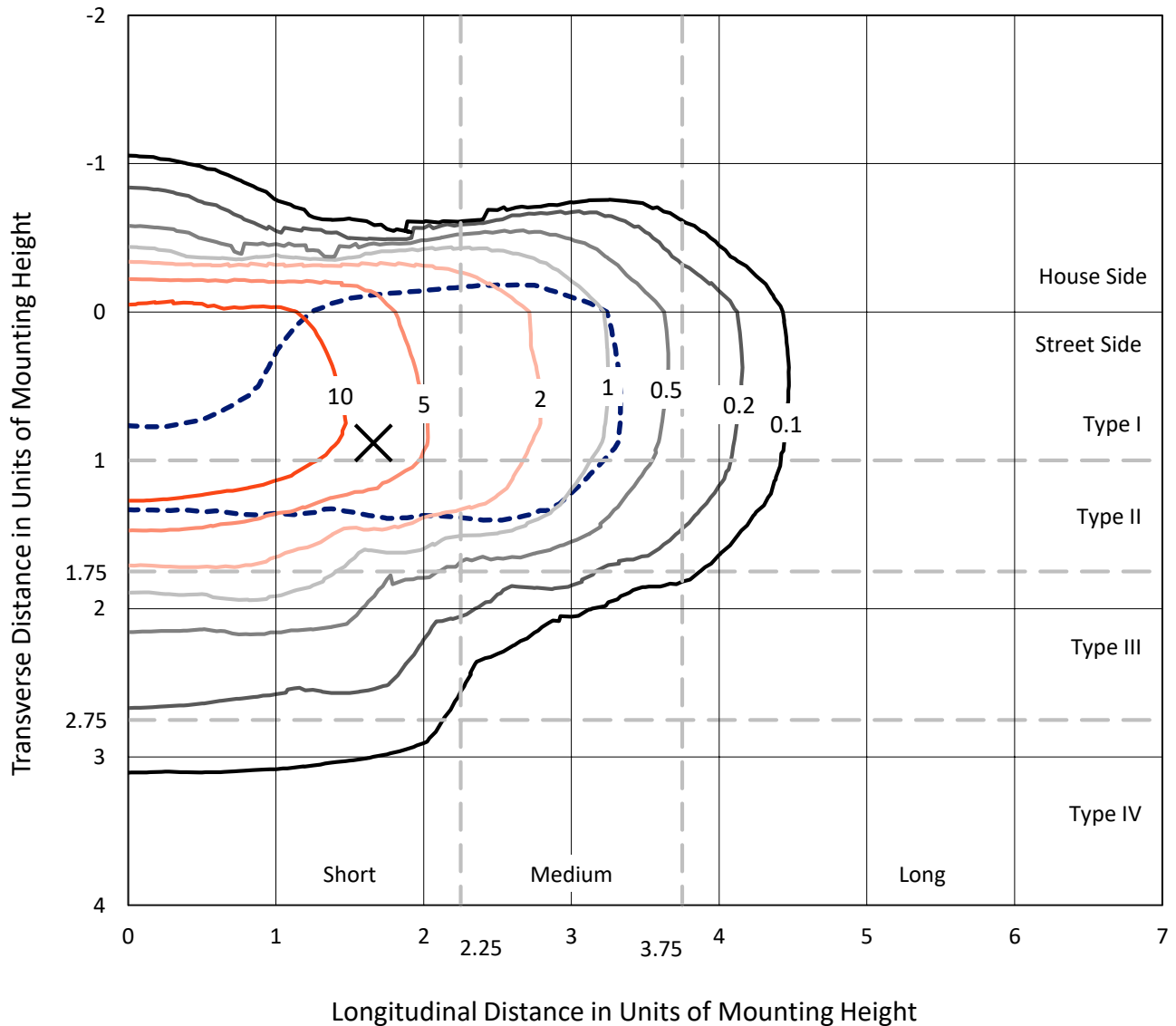


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

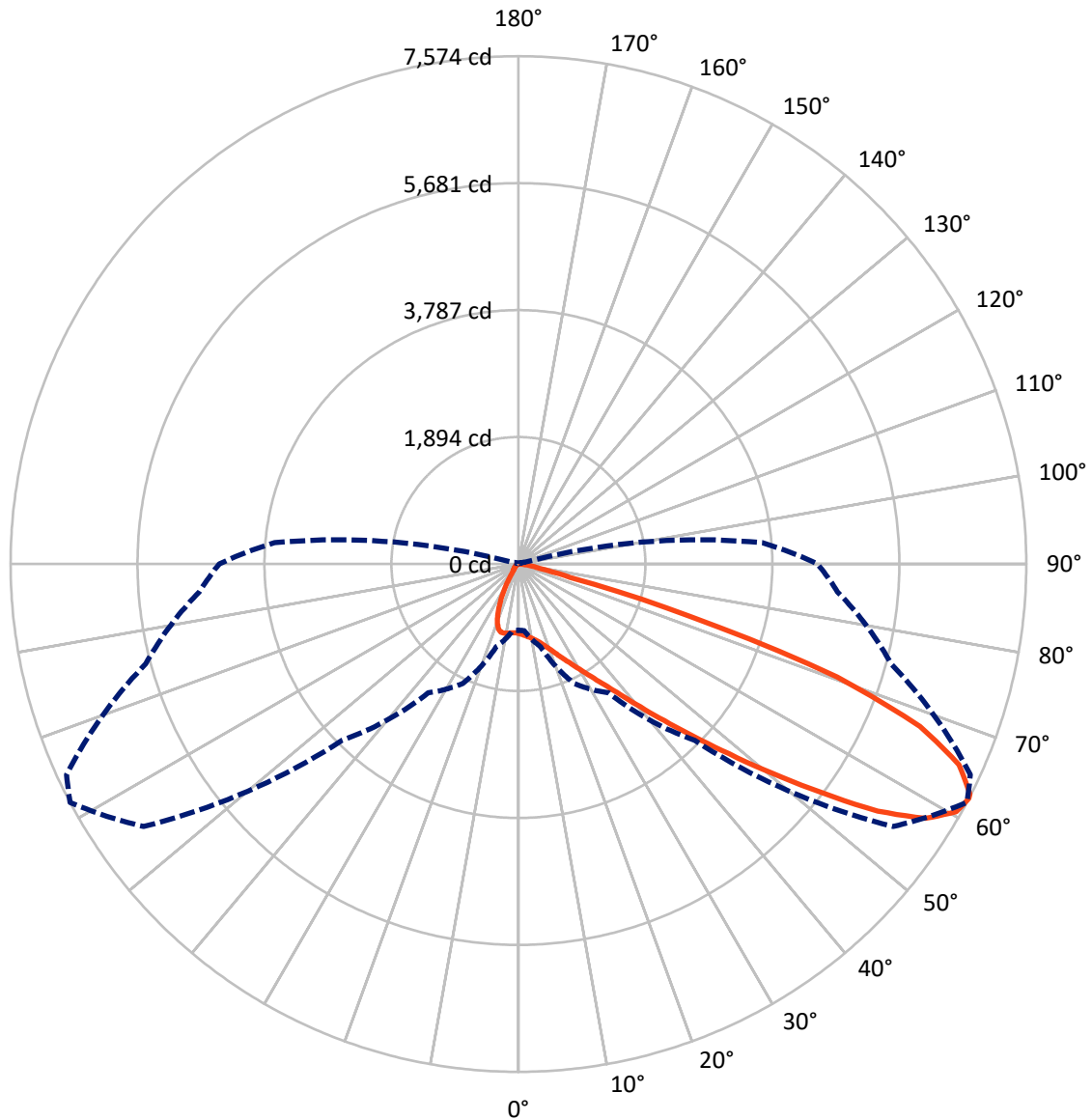


Based on 10 foot mounting height. Maximum calculated value = 19.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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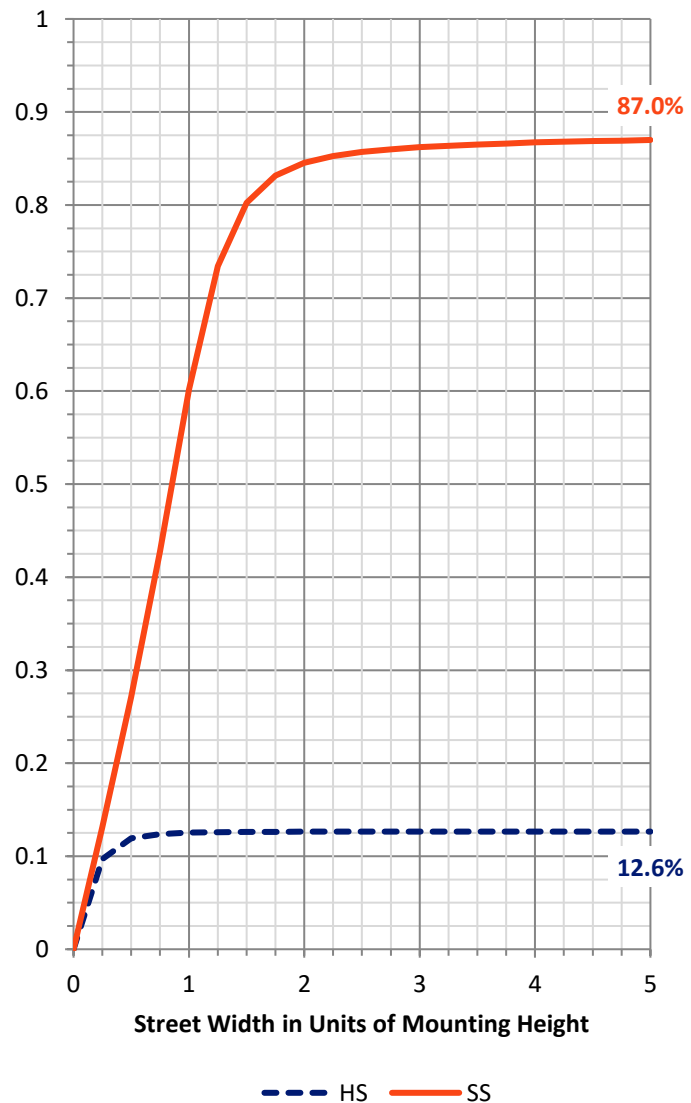
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1101.6	0.0	1101.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7513.9	0.0	7513.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	8615.5	0.0	8615.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.2
10°-20°	278.9	3.2
20°-30°	468.4	5.4
30°-40°	897.9	10.4
40°-50°	1834.0	21.3
50°-60°	2427.0	28.2
60°-70°	1885.4	21.9
70°-80°	680.5	7.9
80°-90°	43.4	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°	8615.5	100.0
0°-180°	8615.5	100.0

Coefficient of Utilization



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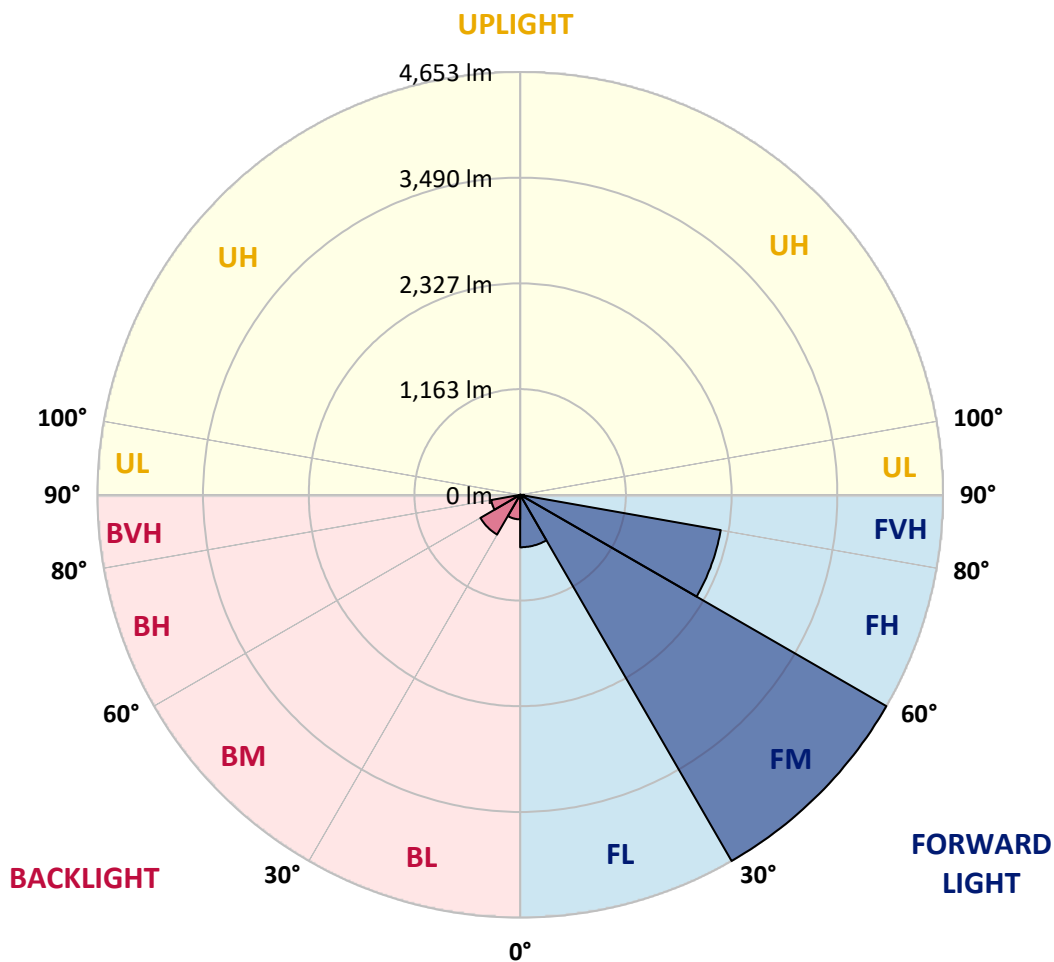
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	577.6	6.7			
FM	(30°-60°)	4653.2	54.0			
FH	(60°-80°)	2241.5	26.0			G2/5000
FVH	(80°-90°)	41.5	0.5			G1/100
BL	(0°-30°)	269.6	3.1	B1/500		
BM	(30°-60°)	505.7	5.9	B1/1000		
BH	(60°-80°)	324.4	3.8	B1/500		G1/500
BVH	(80°-90°)	1.9	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8
2.5°	1065.4	1063.2	1061.2	1059.0	1059.0	1056.9	1054.8	1050.6	1046.3	1042.0	1040.0
5°	1084.4	1082.3	1080.2	1082.3	1080.2	1080.2	1078.1	1073.8	1069.6	1063.2	1056.9
7.5°	1099.3	1097.1	1095.0	1097.1	1099.3	1101.4	1103.5	1099.3	1097.1	1088.7	1082.3
10°	1118.3	1116.2	1114.1	1118.3	1118.3	1128.9	1131.1	1128.9	1126.8	1120.5	1109.9
12.5°	1145.9	1147.9	1147.9	1152.3	1156.5	1169.1	1173.4	1167.1	1167.1	1158.5	1145.9
15°	1196.7	1196.7	1196.7	1200.9	1203.0	1220.0	1224.2	1217.9	1222.1	1207.3	1194.6
17.5°	1245.4	1247.6	1251.8	1260.2	1260.2	1275.1	1283.6	1283.6	1292.0	1273.0	1256.0
20°	1294.1	1296.3	1302.6	1321.6	1321.6	1340.7	1355.5	1361.9	1370.4	1351.3	1321.6
22.5°	1347.1	1347.1	1357.7	1387.3	1381.0	1419.1	1446.6	1457.2	1465.7	1440.3	1393.7
25°	1427.5	1419.1	1427.5	1455.2	1450.9	1503.9	1554.6	1565.2	1575.8	1546.2	1476.3
27.5°	1580.1	1567.4	1537.7	1539.9	1539.9	1601.3	1673.3	1688.1	1694.5	1669.1	1582.2
30°	1885.1	1885.1	1775.0	1700.9	1652.1	1707.1	1808.7	1834.2	1842.8	1804.5	1690.3
32.5°	2416.7	2416.7	2213.3	2024.9	1840.5	1840.5	1957.0	2003.7	2012.2	1967.6	1834.2
35°	3094.5	3090.2	2785.3	2526.8	2166.7	2031.2	2130.8	2209.1	2234.5	2175.2	2020.6
37.5°	3814.7	3787.1	3458.7	3162.3	2668.8	2336.2	2365.9	2469.6	2492.9	2444.2	2262.1
40°	4399.2	4367.4	4102.6	3854.8	3316.8	2823.4	2704.7	2800.0	2827.5	2759.9	2550.1
42.5°	4928.7	4850.3	4668.2	4490.3	4062.4	3666.3	3155.8	3194.1	3223.7	3151.7	2874.1
45°	5312.0	5191.3	5098.2	5043.1	4816.4	4592.0	3740.5	3664.2	3674.7	3585.9	3227.9
47.5°	5322.6	5237.9	5246.5	5390.4	5483.7	5475.2	4500.9	4229.7	4189.4	4041.3	3604.9
50°	4814.3	4863.1	5017.7	5428.5	5932.6	6237.7	5405.2	4899.0	4778.4	4511.5	3979.9
52.5°	3967.2	4043.4	4333.6	5026.1	5998.3	6739.7	6343.6	5663.6	5447.6	4977.4	4267.8
55°	3107.1	3111.4	3416.4	4121.8	5559.9	6830.7	7093.3	6504.4	6174.1	5331.1	4458.5
57.5°	2137.1	2253.6	2641.1	3115.6	4570.8	6377.4	7375.1	7156.8	6731.2	5549.3	4592.0
60°	1400.0	1406.3	1857.5	2406.1	3111.4	5189.1	7203.5	7502.1	7182.3	5678.5	4683.0
62°	987.0	997.6	1277.2	1965.5	2344.7	3719.3	6824.3	7574.1	7436.4	5754.7	4778.4
62.5°	915.1	923.5	1158.5	1855.4	2202.7	3335.9	6688.8	7557.3	7474.5	5780.1	4812.2
65°	671.5	671.5	758.3	1275.1	1614.0	1802.4	5667.9	7220.4	7423.8	5983.5	4939.3
67.5°	519.0	523.2	552.7	785.7	1217.9	1092.9	3617.7	6462.1	6894.2	6284.3	5011.3
70°	446.8	444.8	466.0	521.0	879.0	726.5	1592.8	5043.1	5773.8	6207.9	4945.7
72.5°	330.3	332.6	381.2	457.4	612.1	472.2	720.1	2677.2	3744.8	4858.8	4238.3
75°	211.8	213.9	269.0	360.1	440.6	309.2	415.1	798.6	1533.4	2694.1	2592.5
77.5°	141.9	146.2	175.8	252.1	385.6	192.7	260.5	334.7	461.6	1010.4	929.8
80°	95.3	95.3	112.3	169.4	243.6	160.9	139.7	222.4	239.4	313.5	156.8
82.5°	63.5	63.5	74.1	112.3	158.9	144.0	84.7	120.7	139.7	156.8	55.1
85°	38.1	38.1	50.8	69.9	103.8	80.5	55.1	67.8	72.0	99.5	29.6
87.5°	23.3	21.2	33.9	48.7	55.1	48.7	36.0	36.0	38.1	55.1	14.8
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°	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8	1037.8
2.5°	1035.7	1033.6	1031.6	1027.2	1021.0	1016.6	1012.4	1008.2	1003.9	1003.9	1010.4
5°	1054.8	1048.4	1040.0	1031.6	1018.8	1010.4	1003.9	995.5	991.2	991.2	993.3
7.5°	1078.1	1071.8	1056.9	1042.0	1023.0	1008.2	993.3	974.3	959.5	953.1	959.5
10°	1103.5	1095.0	1073.8	1050.6	1029.4	991.2	942.5	883.3	832.4	809.2	819.7
12.5°	1135.3	1124.7	1099.3	1067.5	1018.8	925.7	804.8	667.3	580.3	540.2	548.5
15°	1181.9	1167.1	1131.1	1082.3	974.3	773.1	576.2	417.3	336.8	302.9	307.1
17.5°	1237.0	1217.9	1169.1	1078.1	859.9	557.0	343.2	243.6	209.7	201.2	201.2
20°	1296.3	1270.8	1207.3	1046.3	686.2	349.5	213.9	186.4	173.7	167.4	167.4
22.5°	1357.7	1323.8	1239.0	972.1	489.2	218.2	175.8	156.8	141.9	135.6	135.6
25°	1431.8	1387.3	1270.8	843.0	311.4	175.8	150.3	131.3	116.5	108.1	110.1
27.5°	1518.7	1461.5	1298.4	682.1	201.2	152.5	125.0	105.9	93.2	88.9	88.9
30°	1609.8	1541.9	1304.7	510.4	163.1	131.3	103.8	86.9	78.3	74.1	74.1
32.5°	1734.6	1645.8	1285.7	338.9	137.7	110.1	86.9	72.0	65.7	63.5	63.5
35°	1899.8	1781.2	1241.2	209.7	116.5	91.1	72.0	63.5	57.2	55.1	55.1
37.5°	2109.6	1969.8	1162.8	144.0	99.5	74.1	61.4	55.1	50.8	48.7	48.7
40°	2389.1	2198.5	1061.2	125.0	84.7	63.5	53.0	48.7	44.5	44.5	44.5
42.5°	2685.8	2476.0	929.8	110.1	72.0	55.1	46.6	42.4	40.2	38.1	38.1
45°	3009.7	2759.9	766.8	97.5	61.4	48.7	42.4	36.0	33.9	33.9	33.9
47.5°	3331.6	3052.1	588.7	84.7	53.0	42.4	36.0	31.8	29.6	27.6	27.6
50°	3662.1	3316.8	432.1	74.1	46.6	38.1	31.8	27.6	23.3	21.2	21.2
52.5°	3901.5	3475.7	315.6	63.5	40.2	31.8	25.4	21.2	17.0	14.8	14.8
55°	4077.2	3573.2	230.9	53.0	36.0	27.6	21.2	17.0	12.7	12.7	10.6
57.5°	4214.8	3619.7	173.7	46.6	31.8	23.3	17.0	12.7	10.6	8.4	8.4
60°	4320.8	3621.8	129.1	38.1	27.6	19.0	12.7	8.4	6.4	6.4	6.4
62°	4460.7	3649.4	105.9	31.8	25.4	17.0	10.6	6.4	4.2	2.2	2.2
62.5°	4500.9	3660.0	101.7	31.8	23.3	14.8	8.4	6.4	4.2	2.2	2.2
65°	4687.3	3679.1	78.3	25.4	19.0	12.7	6.4	4.2	0.0	0.0	0.0
67.5°	4856.6	3649.4	57.2	19.0	14.8	8.4	6.4	2.2	0.0	0.0	0.0
70°	4839.8	3446.1	40.2	12.7	10.6	6.4	4.2	0.0	0.0	0.0	0.0
72.5°	3988.3	2579.8	27.6	10.6	6.4	4.2	2.2	0.0	0.0	0.0	0.0
75°	2408.3	1128.9	19.0	6.4	6.4	4.2	2.2	0.0	0.0	0.0	0.0
77.5°	790.0	408.8	12.7	4.2	4.2	2.2	2.2	0.0	0.0	0.0	0.0
80°	129.1	67.8	6.4	4.2	4.2	2.2	2.2	0.0	0.0	0.0	0.0
82.5°	40.2	17.0	4.2	4.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0
85°	14.8	6.4	4.2	4.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0
87.5°	6.4	4.2	4.2	4.2	2.2	2.2	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)