

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: P265836

Luminaire Tested: **ARCH-M-AF48-130-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265836
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-AF48-130-D-U-T2U-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA 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: 9767.7 lumens
Efficiency: N/A
Efficacy: 74.6 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): 131
Input Voltage (V): NR
Input Current (A_{in}): 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

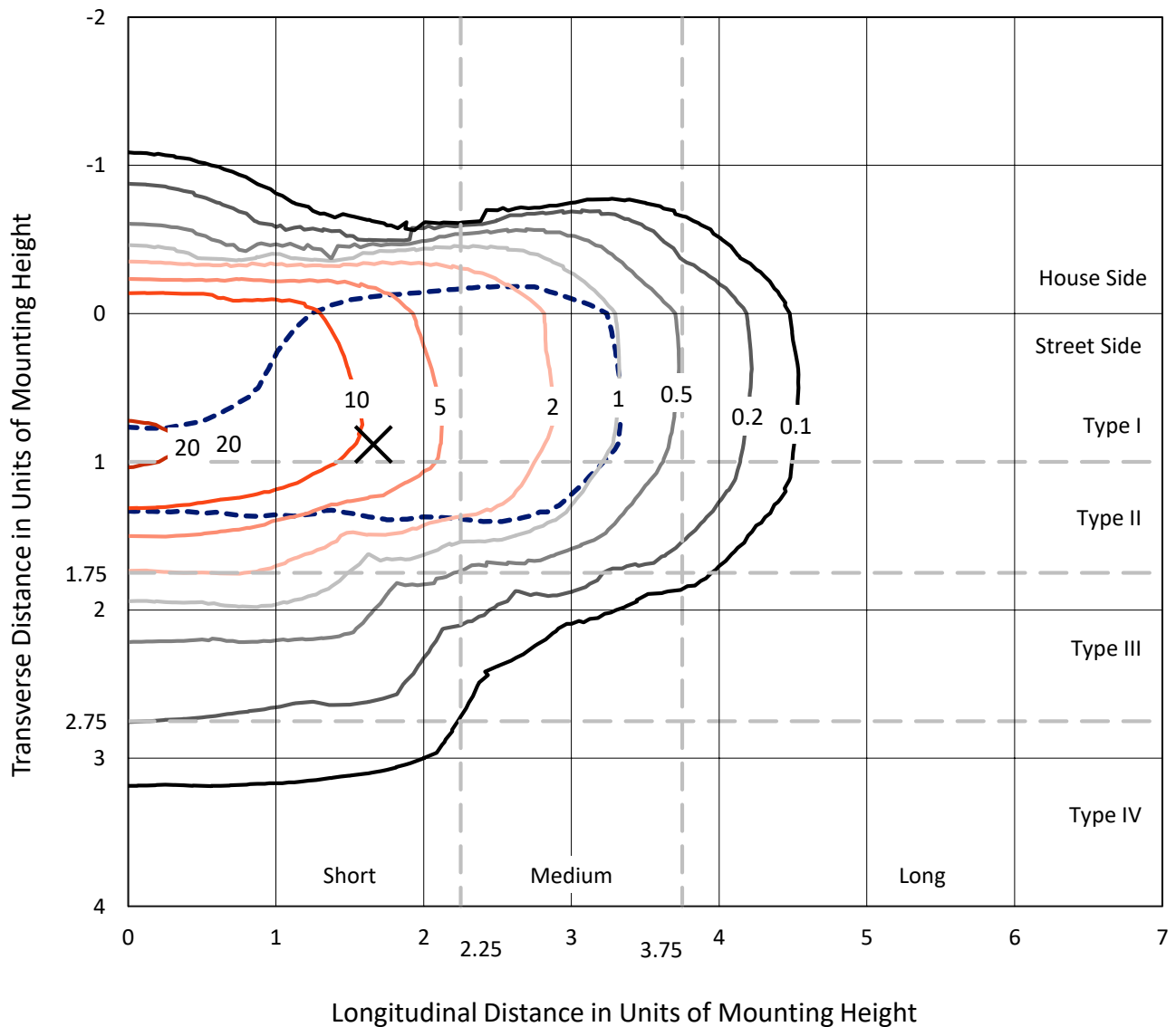


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

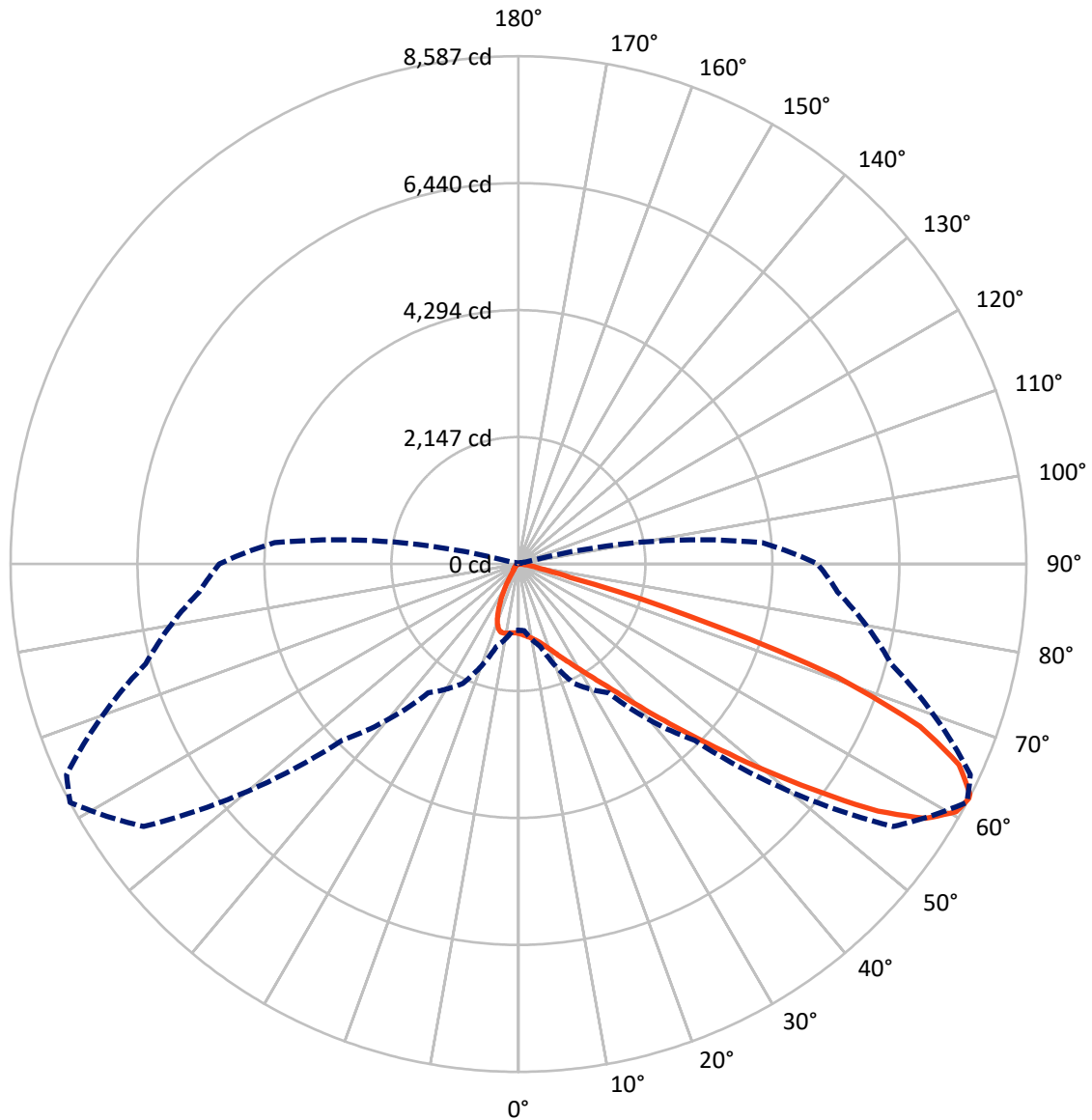


Based on 10 foot mounting height. Maximum calculated value = 22.5 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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



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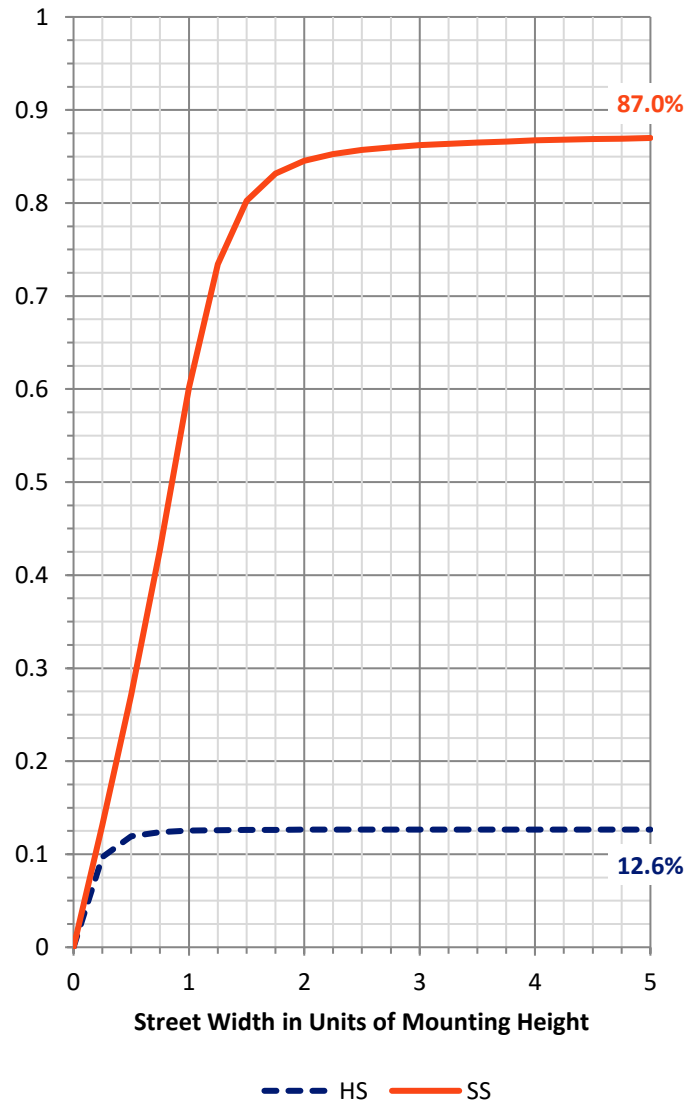
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1248.9	0.0	1248.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8518.8	0.0	8518.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	9767.7	0.0	9767.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	1.2
10°-20°	316.2	3.2
20°-30°	531.1	5.4
30°-40°	1018.0	10.4
40°-50°	2079.3	21.3
50°-60°	2751.6	28.2
60°-70°	2137.6	21.9
70°-80°	771.5	7.9
80°-90°	49.2	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°	9767.7	100.0
0°-180°	9767.7	100.0



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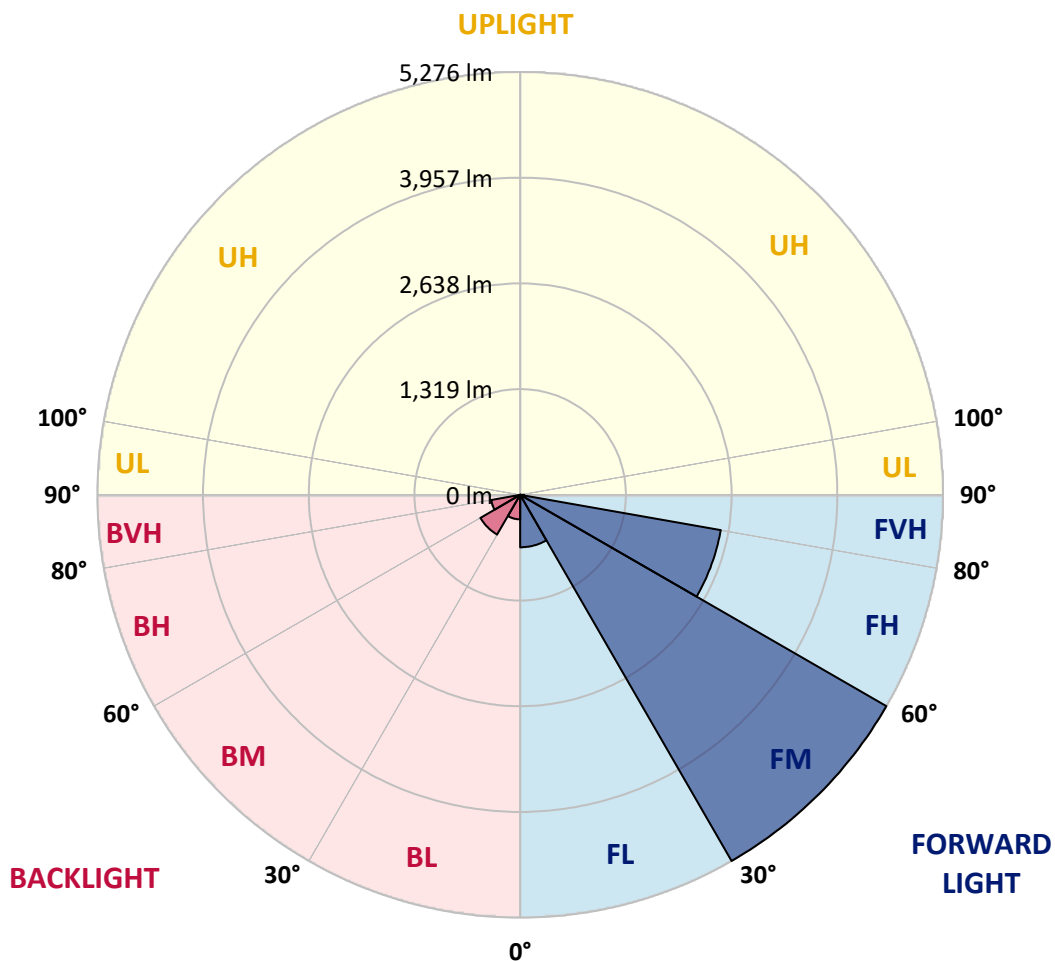
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	654.8	6.7			
FM (30°-60°)	5275.6	54.0			
FH (60°-80°)	2541.3	26.0			G2/5000
FVH (80°-90°)	47.0	0.5			G1/100
BL (0°-30°)	305.7	3.1	B1/500		
BM (30°-60°)	573.4	5.9	B1/1000		
BH (60°-80°)	367.8	3.8	B1/500		G1/500
BVH (80°-90°)	2.1	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°	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6
2.5°	1208.0	1205.4	1203.1	1200.7	1200.7	1198.2	1195.9	1191.1	1186.2	1181.5	1179.0
5°	1229.5	1227.1	1224.7	1227.1	1224.7	1224.7	1222.2	1217.5	1212.6	1205.4	1198.2
7.5°	1246.3	1244.0	1241.5	1244.0	1246.3	1248.6	1251.1	1246.3	1244.0	1234.4	1227.1
10°	1267.9	1265.5	1263.0	1267.9	1267.9	1279.9	1282.3	1279.9	1277.5	1270.4	1258.3
12.5°	1299.0	1301.6	1301.6	1306.3	1311.2	1325.4	1330.3	1323.2	1323.2	1313.5	1299.0
15°	1356.7	1356.7	1356.7	1361.6	1363.9	1383.2	1388.1	1380.8	1385.5	1368.7	1354.4
17.5°	1412.0	1414.4	1419.2	1428.8	1428.8	1445.6	1455.3	1455.3	1464.7	1443.1	1424.1
20°	1467.2	1469.5	1476.9	1498.5	1498.5	1520.0	1536.8	1544.0	1553.7	1532.0	1498.5
22.5°	1527.3	1527.3	1539.2	1572.8	1565.7	1608.9	1640.0	1652.2	1661.8	1632.8	1580.1
25°	1618.4	1608.9	1618.4	1649.6	1644.8	1705.0	1762.6	1774.6	1786.5	1753.0	1673.7
27.5°	1791.4	1776.9	1743.4	1745.8	1745.8	1815.5	1897.0	1913.8	1921.0	1892.2	1793.7
30°	2137.2	2137.2	2012.4	1928.2	1873.1	1935.5	2050.7	2079.5	2089.2	2045.9	1916.3
32.5°	2739.9	2739.9	2509.3	2295.7	2086.8	2086.8	2218.9	2271.6	2281.2	2230.9	2079.5
35°	3508.3	3503.5	3157.7	2864.8	2456.5	2302.8	2415.7	2504.6	2533.4	2466.1	2290.9
37.5°	4324.8	4293.5	3921.3	3585.1	3025.8	2648.7	2682.2	2799.9	2826.3	2771.1	2564.7
40°	4987.5	4951.5	4651.3	4370.4	3760.5	3201.0	3066.5	3174.5	3205.7	3128.9	2891.1
42.5°	5587.8	5499.1	5292.5	5090.9	4605.7	4156.6	3577.9	3621.2	3654.8	3573.2	3258.6
45°	6022.4	5885.6	5780.0	5717.5	5460.5	5206.0	4240.7	4154.3	4166.2	4065.4	3659.7
47.5°	6034.5	5938.4	5948.0	6111.3	6217.0	6207.4	5102.8	4795.4	4749.8	4581.7	4087.1
50°	5458.2	5513.4	5688.7	6154.6	6726.1	7071.8	6128.1	5554.3	5417.4	5114.8	4512.0
52.5°	4497.6	4584.1	4913.1	5698.4	6800.6	7641.1	7192.0	6421.2	6176.1	5643.2	4838.7
55°	3522.8	3527.6	3873.3	4673.0	6303.4	7744.3	8042.0	7374.5	6999.9	6044.2	5054.9
57.5°	2422.9	2555.0	2994.4	3532.3	5182.1	7230.4	8361.5	8114.1	7631.5	6291.5	5206.0
60°	1587.2	1594.5	2105.9	2728.0	3527.6	5883.2	8166.9	8505.5	8142.9	6438.0	5309.3
62°	1119.0	1131.1	1448.0	2228.4	2658.3	4216.7	7737.0	8587.1	8431.0	6524.4	5417.4
62.5°	1037.4	1047.0	1313.5	2103.6	2497.4	3782.0	7583.4	8567.9	8474.3	6553.2	5455.8
65°	761.3	761.3	859.7	1445.6	1829.8	2043.6	6425.9	8186.2	8416.6	6783.7	5599.9
67.5°	588.3	593.2	626.7	890.8	1380.8	1239.1	4101.4	7326.4	7816.3	7124.6	5681.5
70°	506.6	504.3	528.4	590.7	996.6	823.7	1805.9	5717.5	6545.9	7038.3	5607.1
72.5°	374.7	377.0	432.3	518.7	694.0	535.5	816.5	3035.3	4245.5	5508.6	4805.0
75°	240.1	242.5	305.0	408.2	499.5	350.6	470.6	905.3	1738.6	3054.4	2939.3
77.5°	160.8	165.6	199.3	285.8	437.0	218.5	295.4	379.4	523.5	1145.3	1054.3
80°	108.1	108.1	127.3	192.1	276.1	182.4	158.6	252.2	271.4	355.4	177.8
82.5°	72.0	72.0	84.0	127.3	180.1	163.3	96.1	136.9	158.6	177.8	62.4
85°	43.2	43.2	57.6	79.2	117.7	91.3	62.4	76.8	81.7	112.8	33.6
87.5°	26.4	24.1	38.4	55.2	62.4	55.2	40.9	40.9	43.2	62.4	16.8
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°	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6	1176.6
2.5°	1174.3	1171.8	1169.5	1164.7	1157.5	1152.6	1147.9	1143.1	1138.2	1138.2	1145.3
5°	1195.9	1188.6	1179.0	1169.5	1155.0	1145.3	1138.2	1128.6	1123.8	1123.8	1126.3
7.5°	1222.2	1215.0	1198.2	1181.5	1159.8	1143.1	1126.3	1104.6	1087.8	1080.7	1087.8
10°	1251.1	1241.5	1217.5	1191.1	1167.1	1123.8	1068.5	1001.3	943.7	917.3	929.2
12.5°	1287.1	1275.1	1246.3	1210.2	1155.0	1049.4	912.5	756.5	658.0	612.4	621.9
15°	1339.9	1323.2	1282.3	1227.1	1104.6	876.4	653.2	473.0	381.8	343.4	348.3
17.5°	1402.3	1380.8	1325.4	1222.2	974.9	631.6	389.1	276.1	237.7	228.1	228.1
20°	1469.5	1440.8	1368.7	1186.2	778.0	396.2	242.5	211.3	196.9	189.7	189.7
22.5°	1539.2	1500.8	1404.8	1102.2	554.8	247.4	199.3	177.8	160.8	153.7	153.7
25°	1623.2	1572.8	1440.8	955.7	353.0	199.3	170.5	148.8	132.1	122.4	124.9
27.5°	1721.7	1657.0	1472.1	773.3	228.1	173.0	141.8	120.1	105.7	100.9	100.9
30°	1824.9	1748.1	1479.1	578.7	185.0	148.8	117.7	98.5	88.8	84.0	84.0
32.5°	1966.7	1865.8	1457.6	384.2	156.0	124.9	98.5	81.7	74.4	72.0	72.0
35°	2154.0	2019.5	1407.1	237.7	132.1	103.2	81.7	72.0	64.9	62.4	62.4
37.5°	2391.6	2233.2	1318.4	163.3	112.8	84.0	69.7	62.4	57.6	55.2	55.2
40°	2708.7	2492.5	1203.1	141.8	96.1	72.0	60.0	55.2	50.5	50.5	50.5
42.5°	3044.9	2807.2	1054.3	124.9	81.7	62.4	52.8	48.0	45.6	43.2	43.2
45°	3412.3	3128.9	869.3	110.4	69.7	55.2	48.0	40.9	38.4	38.4	38.4
47.5°	3777.3	3460.4	667.6	96.1	60.0	48.0	40.9	36.0	33.6	31.3	31.3
50°	4151.8	3760.5	489.8	84.0	52.8	43.2	36.0	31.3	26.4	24.1	24.1
52.5°	4423.3	3940.5	357.7	72.0	45.6	36.0	28.8	24.1	19.3	16.8	16.8
55°	4622.6	4051.0	261.8	60.0	40.9	31.3	24.1	19.3	14.5	14.5	11.9
57.5°	4778.7	4103.8	196.9	52.8	36.0	26.4	19.3	14.5	11.9	9.6	9.6
60°	4898.6	4106.2	146.5	43.2	31.3	21.6	14.5	9.6	7.1	7.1	7.1
62°	5057.2	4137.5	120.1	36.0	28.8	19.3	11.9	7.1	4.9	2.3	2.3
62.5°	5102.8	4149.5	115.3	36.0	26.4	16.8	9.6	7.1	4.9	2.3	2.3
65°	5314.2	4171.1	88.8	28.8	21.6	14.5	7.1	4.9	0.0	0.0	0.0
67.5°	5506.3	4137.5	64.9	21.6	16.8	9.6	7.1	2.3	0.0	0.0	0.0
70°	5486.9	3907.0	45.6	14.5	11.9	7.1	4.9	0.0	0.0	0.0	0.0
72.5°	4521.7	2924.8	31.3	11.9	7.1	4.9	2.3	0.0	0.0	0.0	0.0
75°	2730.3	1279.9	21.6	7.1	7.1	4.9	2.3	0.0	0.0	0.0	0.0
77.5°	895.7	463.4	14.5	4.9	4.9	2.3	2.3	0.0	0.0	0.0	0.0
80°	146.5	76.8	7.1	4.9	4.9	2.3	2.3	0.0	0.0	0.0	0.0
82.5°	45.6	19.3	4.9	4.9	2.3	2.3	0.0	0.0	0.0	0.0	0.0
85°	16.8	7.1	4.9	4.9	2.3	2.3	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	4.9	4.9	4.9	2.3	2.3	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)