

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: P572866

Luminaire Tested: **ARCH-S-PA2-120-827-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572866
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-120-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8424 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

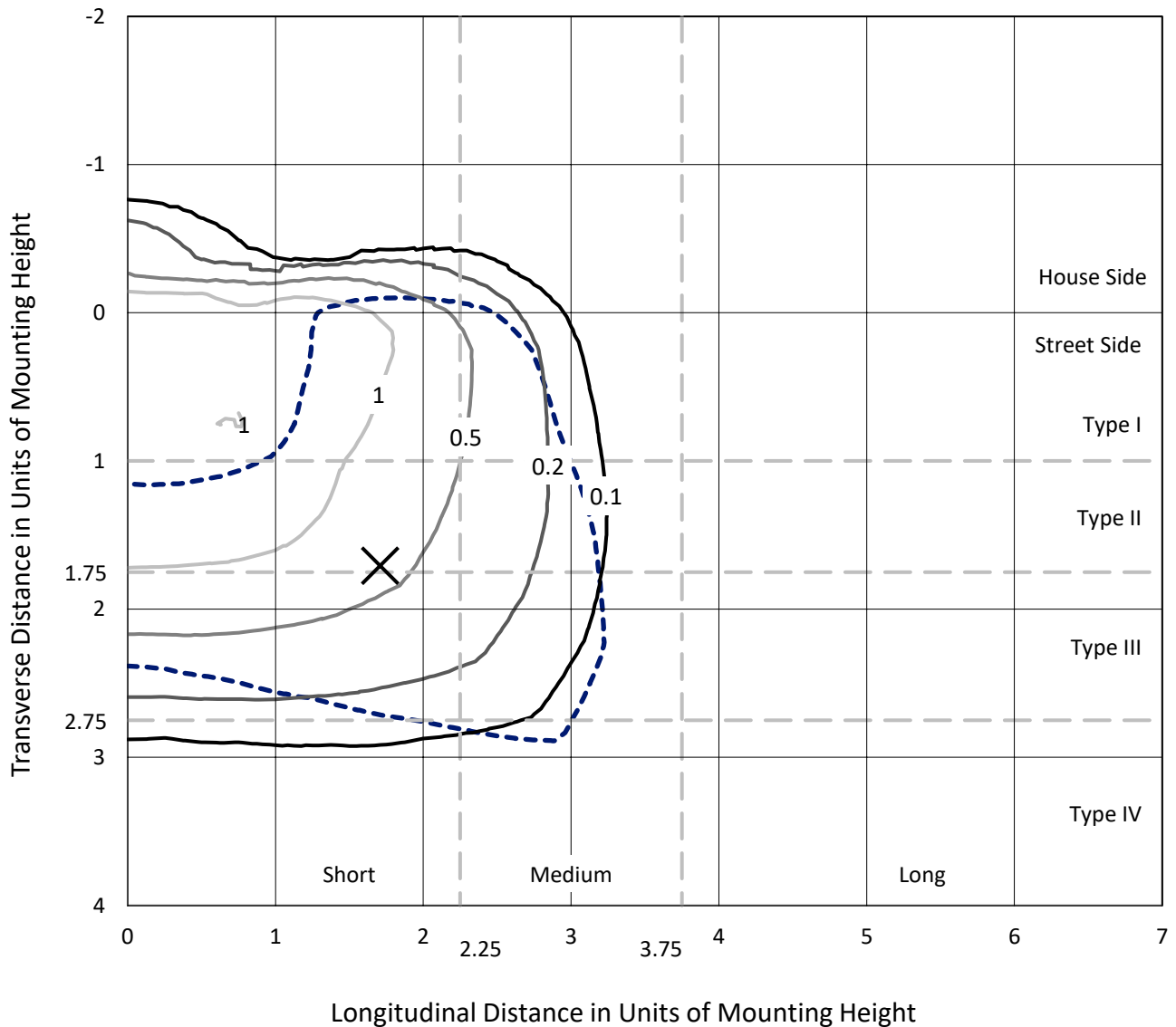
Input Watts (W): 122.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

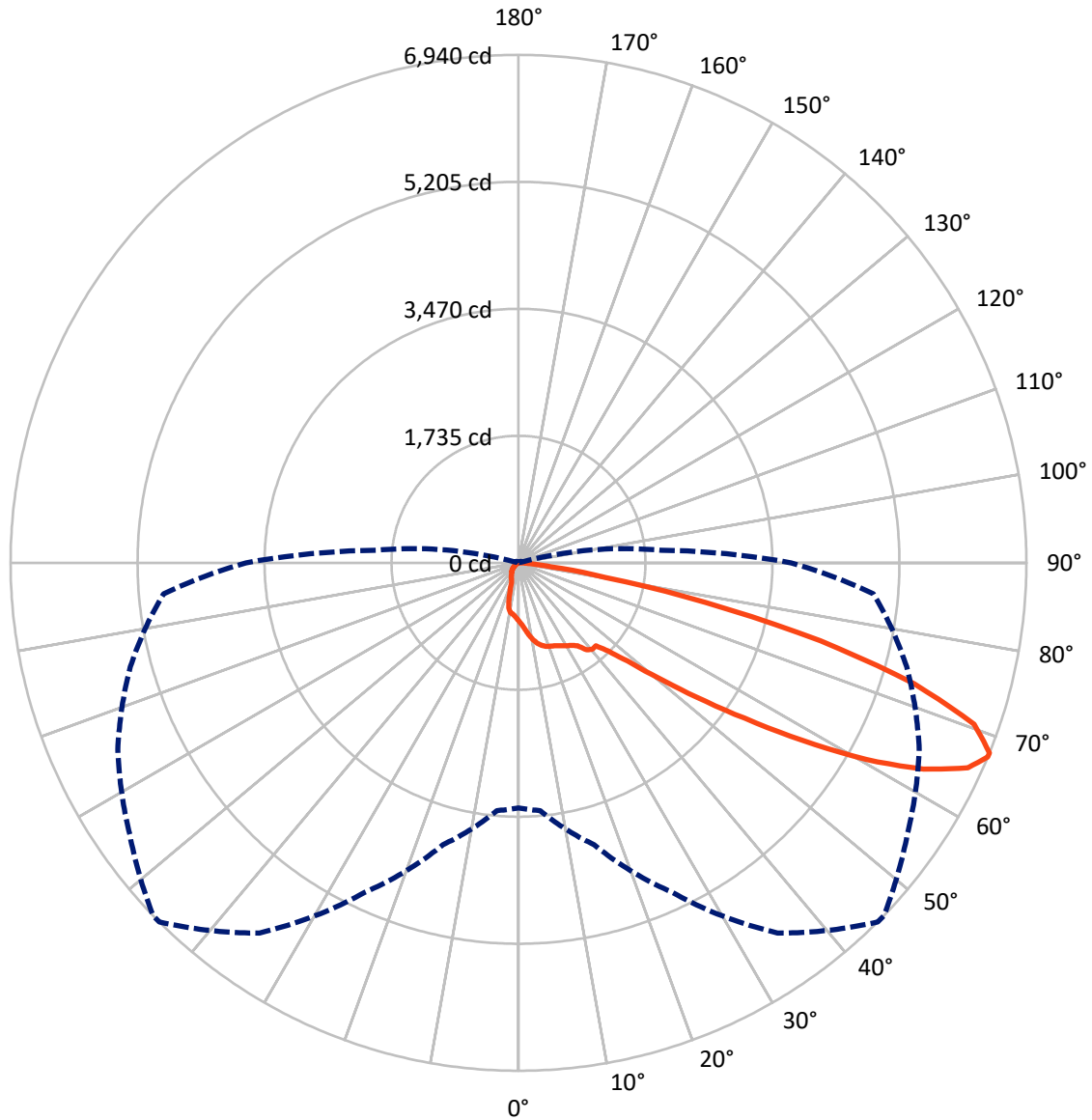
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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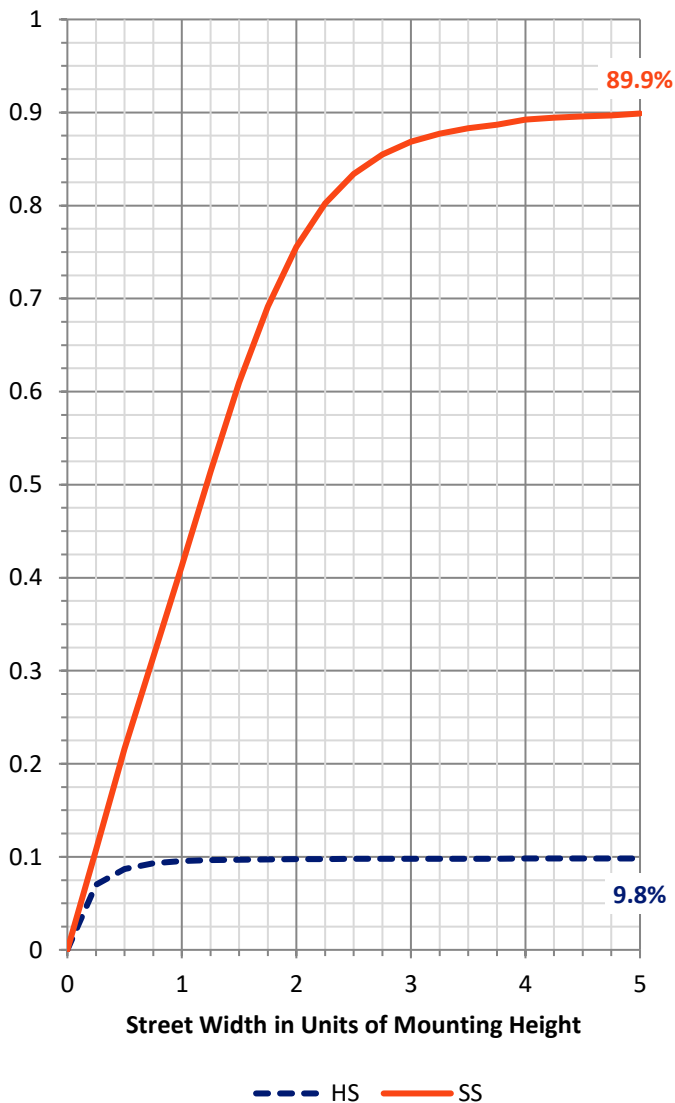
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	834.7	0.0	834.7
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	7589.3	0.0	7589.3
	% Fixture	90.1	0.0	90.1
Total	Lumens	8424.0	0.0	8424.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	0.9
10°-20°	241.7	2.9
20°-30°	386.7	4.6
30°-40°	556.5	6.6
40°-50°	976.3	11.6
50°-60°	2057.1	24.4
60°-70°	2844.7	33.8
70°-80°	1190.9	14.1
80°-90°	90.1	1.1
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°	8424.0	100.0
0°-180°	8424.0	100.0

Coefficient of Utilization



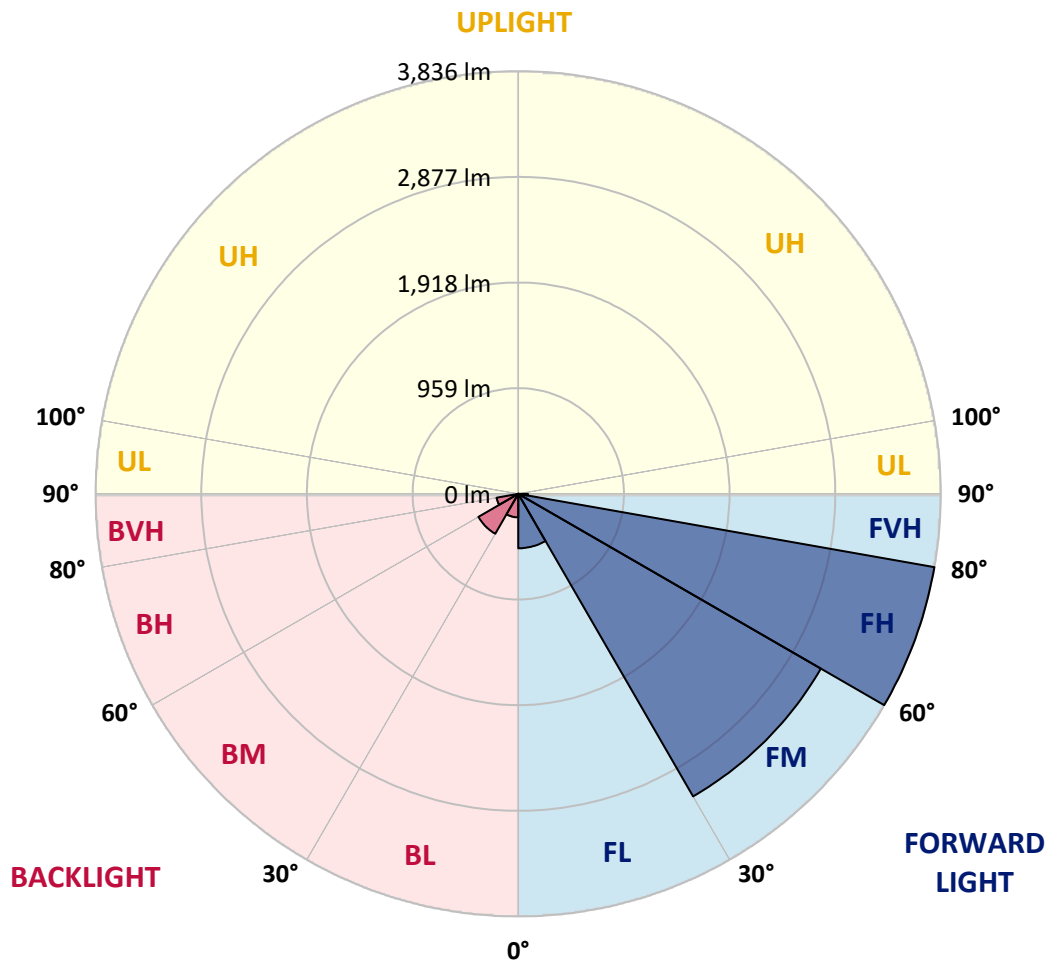
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	494.4	5.9			
FM (30°-60°)	3171.8	37.7			
FH (60°-80°)	3836.1	45.5			G2/5000
FVH (80°-90°)	87.0	1.0			G1/100
BL (0°-30°)	213.9	2.5	B1/500		
BM (30°-60°)	418.2	5.0	B1/1000		
BH (60°-80°)	199.5	2.4	B1/500		G1/500
BVH (80°-90°)	3.0	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7
2.5°	886.9	871.4	868.3	865.1	855.8	843.4	846.5	837.1	821.6	812.2	802.9
5°	995.9	980.3	974.1	955.4	936.7	908.7	908.7	883.8	855.8	830.9	806.0
7.5°	1107.9	1095.4	1083.0	1055.0	1027.0	989.6	986.5	949.2	905.6	868.3	827.8
10°	1201.2	1191.9	1176.4	1142.1	1104.8	1064.3	1055.0	1020.8	964.7	914.9	862.0
12.5°	1275.9	1266.6	1244.8	1210.6	1163.9	1123.4	1120.3	1076.8	1020.8	967.8	902.5
15°	1332.0	1316.4	1291.5	1254.2	1207.5	1170.1	1163.9	1126.6	1073.7	1014.5	936.7
17.5°	1341.3	1332.0	1310.2	1269.7	1229.3	1198.1	1195.0	1167.0	1120.3	1058.1	977.2
20°	1316.4	1313.3	1294.6	1263.5	1232.4	1216.8	1213.7	1195.0	1157.7	1101.7	1020.8
22.5°	1279.1	1275.9	1263.5	1247.9	1235.5	1232.4	1232.4	1226.1	1204.4	1151.5	1076.8
25°	1254.2	1251.0	1244.8	1235.5	1235.5	1254.2	1257.3	1263.5	1244.8	1204.4	1123.4
27.5°	1257.3	1251.0	1244.8	1235.5	1247.9	1282.2	1285.3	1300.8	1285.3	1247.9	1176.4
30°	1300.8	1291.5	1272.8	1251.0	1266.6	1313.3	1316.4	1335.1	1322.6	1303.9	1235.5
32.5°	1369.3	1363.1	1325.7	1288.4	1297.7	1344.4	1350.6	1384.9	1400.4	1372.4	1288.4
35°	1468.9	1447.1	1400.4	1363.1	1356.9	1391.1	1400.4	1456.4	1496.9	1428.4	1319.5
37.5°	1549.8	1531.1	1456.4	1397.3	1431.5	1509.3	1512.5	1580.9	1546.7	1434.7	1369.3
40°	1823.7	1820.5	1689.8	1503.1	1465.8	1552.9	1565.4	1577.8	1562.2	1506.2	1478.2
42.5°	2265.6	2228.2	2082.0	1795.7	1540.5	1549.8	1556.0	1621.4	1702.3	1677.4	1686.7
45°	2744.8	2713.7	2548.8	2187.8	1795.7	1717.8	1724.1	1829.9	1985.5	2016.6	2066.4
47.5°	3186.7	3136.9	3043.6	2679.5	2231.3	2004.2	2016.6	2144.2	2402.5	2471.0	2548.8
50°	3560.2	3525.9	3438.8	3199.2	2766.6	2455.4	2467.9	2573.7	2909.8	3018.7	3118.3
52.5°	4101.7	4055.0	3886.9	3774.9	3448.1	3043.6	3015.6	3127.6	3513.5	3585.1	3718.9
55°	4599.6	4503.1	4403.5	4356.9	4219.9	3746.9	3737.6	3759.4	4079.9	4117.2	4356.9
57.5°	4811.2	4792.6	4876.6	5032.2	5063.3	4574.7	4534.3	4450.2	4702.3	4699.2	4979.3
60°	4945.0	4945.0	5169.1	5555.0	5804.0	5458.5	5402.5	5141.1	5231.3	5234.5	5492.8
62.5°	4861.0	4882.8	5231.3	5813.3	6314.3	6208.5	6171.2	5732.4	5726.2	5654.6	5744.8
65°	4341.3	4378.6	4938.8	5670.1	6501.1	6750.0	6734.5	6236.5	6056.0	5794.6	5592.3
67°	3541.5	3610.0	4288.4	5153.5	6289.4	6936.7	6939.9	6454.4	6059.2	5561.2	5054.0
67.5°	3348.6	3398.4	3986.5	4966.8	6174.3	6939.9	6939.9	6482.4	6040.5	5489.6	4867.2
70°	2134.9	2147.3	2788.4	3843.4	5274.9	6603.8	6628.7	6270.8	5502.1	4444.0	3417.0
72.5°	1055.0	1027.0	1472.0	2474.1	3958.5	5651.5	5716.8	5355.8	4353.8	2903.5	1805.0
75°	413.9	441.9	641.1	1316.4	2480.3	4260.4	4310.2	3896.3	2800.8	1496.9	712.7
77.5°	183.6	183.6	273.9	591.3	1303.9	2614.1	2639.0	2377.6	1478.2	616.2	217.8
80°	99.6	105.8	143.2	258.3	656.6	1201.2	1310.2	1179.5	669.1	270.7	74.7
82.5°	49.8	52.9	87.1	146.3	329.9	454.4	479.3	501.0	308.1	168.1	31.1
85°	18.7	21.8	46.7	84.0	149.4	152.5	152.5	196.1	168.1	127.6	15.6
87.5°	3.1	6.2	21.8	34.2	59.1	52.9	46.7	62.2	93.4	80.9	9.3
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°	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7
2.5°	796.7	790.5	778.0	768.7	762.5	756.2	750.0	750.0	746.9	746.9	750.0
5°	796.7	784.2	759.3	743.8	731.3	722.0	715.8	715.8	712.7	715.8	718.9
7.5°	812.2	793.6	759.3	731.3	715.8	700.2	694.0	690.9	690.9	694.0	690.9
10°	837.1	812.2	768.7	731.3	709.5	687.8	653.5	622.4	594.4	582.0	578.8
12.5°	868.3	837.1	784.2	740.7	706.4	631.7	538.4	479.3	441.9	423.2	417.0
15°	902.5	865.1	802.9	753.1	659.8	519.7	398.3	333.0	311.2	314.3	317.4
17.5°	939.8	899.4	830.9	746.9	566.4	385.9	292.5	277.0	286.3	295.6	295.6
20°	977.2	933.6	858.9	700.2	445.0	286.3	261.4	264.5	273.9	283.2	283.2
22.5°	1027.0	980.3	886.9	619.3	329.9	249.0	249.0	255.2	261.4	270.7	270.7
25°	1079.9	1033.2	905.6	519.7	245.9	233.4	236.5	242.7	249.0	258.3	258.3
27.5°	1135.9	1089.2	902.5	401.5	214.7	214.7	217.8	227.2	233.4	242.7	242.7
30°	1198.1	1157.7	868.3	292.5	199.2	196.1	196.1	205.4	214.7	221.0	224.1
32.5°	1251.0	1216.8	809.1	221.0	186.7	180.5	177.4	180.5	189.8	196.1	199.2
35°	1294.6	1282.2	722.0	189.8	174.3	164.9	158.7	155.6	158.7	158.7	161.8
37.5°	1375.5	1378.6	619.3	177.4	164.9	152.5	140.0	130.7	124.5	121.4	118.3
40°	1528.0	1524.9	510.4	168.1	155.6	140.0	121.4	108.9	93.4	87.1	87.1
42.5°	1742.7	1696.1	389.0	158.7	146.3	127.6	102.7	84.0	68.5	65.4	65.4
45°	2128.6	1935.7	292.5	152.5	136.9	112.0	84.0	62.2	52.9	49.8	49.8
47.5°	2555.0	2212.7	233.4	143.2	127.6	99.6	65.4	49.8	40.5	40.5	40.5
50°	3024.9	2477.2	196.1	133.8	112.0	84.0	52.9	40.5	37.3	34.2	37.3
52.5°	3538.4	2685.7	171.2	121.4	96.5	68.5	43.6	37.3	31.1	31.1	31.1
55°	3999.0	2825.7	143.2	105.8	80.9	56.0	40.5	31.1	28.0	24.9	21.8
57.5°	4416.0	2900.4	115.1	90.2	62.2	46.7	34.2	24.9	21.8	15.6	15.6
60°	4630.7	2832.0	90.2	71.6	49.8	37.3	28.0	21.8	15.6	9.3	9.3
62.5°	4665.0	2654.6	71.6	56.0	43.6	31.1	21.8	15.6	9.3	6.2	6.2
65°	4366.2	2343.4	59.1	46.7	34.2	24.9	18.7	12.4	6.2	3.1	3.1
67°	3830.9	2016.6	52.9	40.5	31.1	21.8	15.6	9.3	6.2	3.1	0.0
67.5°	3725.1	1957.5	49.8	40.5	31.1	21.8	15.6	9.3	6.2	3.1	0.0
70°	2446.1	1353.7	46.7	37.3	28.0	18.7	12.4	9.3	3.1	0.0	0.0
72.5°	1335.1	681.5	43.6	34.2	24.9	18.7	12.4	6.2	3.1	0.0	0.0
75°	488.6	258.3	37.3	31.1	21.8	18.7	12.4	6.2	3.1	0.0	0.0
77.5°	164.9	90.2	34.2	31.1	24.9	18.7	12.4	6.2	3.1	0.0	0.0
80°	56.0	40.5	28.0	24.9	18.7	15.6	12.4	6.2	3.1	0.0	0.0
82.5°	21.8	12.4	9.3	9.3	9.3	12.4	12.4	9.3	3.1	0.0	0.0
85°	9.3	6.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	0.0
87.5°	9.3	6.2	3.1	3.1	3.1	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)