

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: P572713

Luminaire Tested: **ARCH-S-PA2-100-830-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572713
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-PA2-100-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 1010mA 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: 8101 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

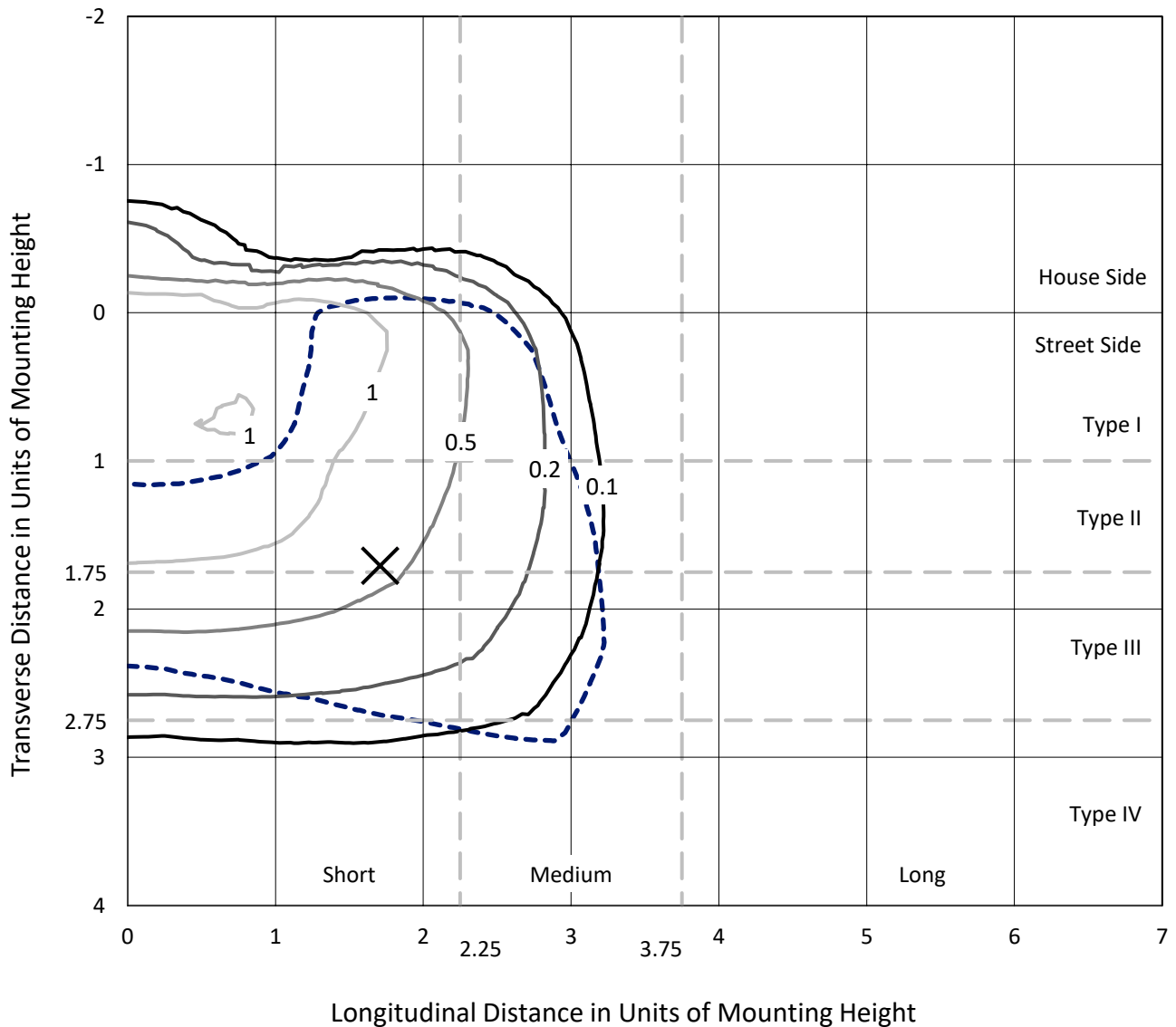
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

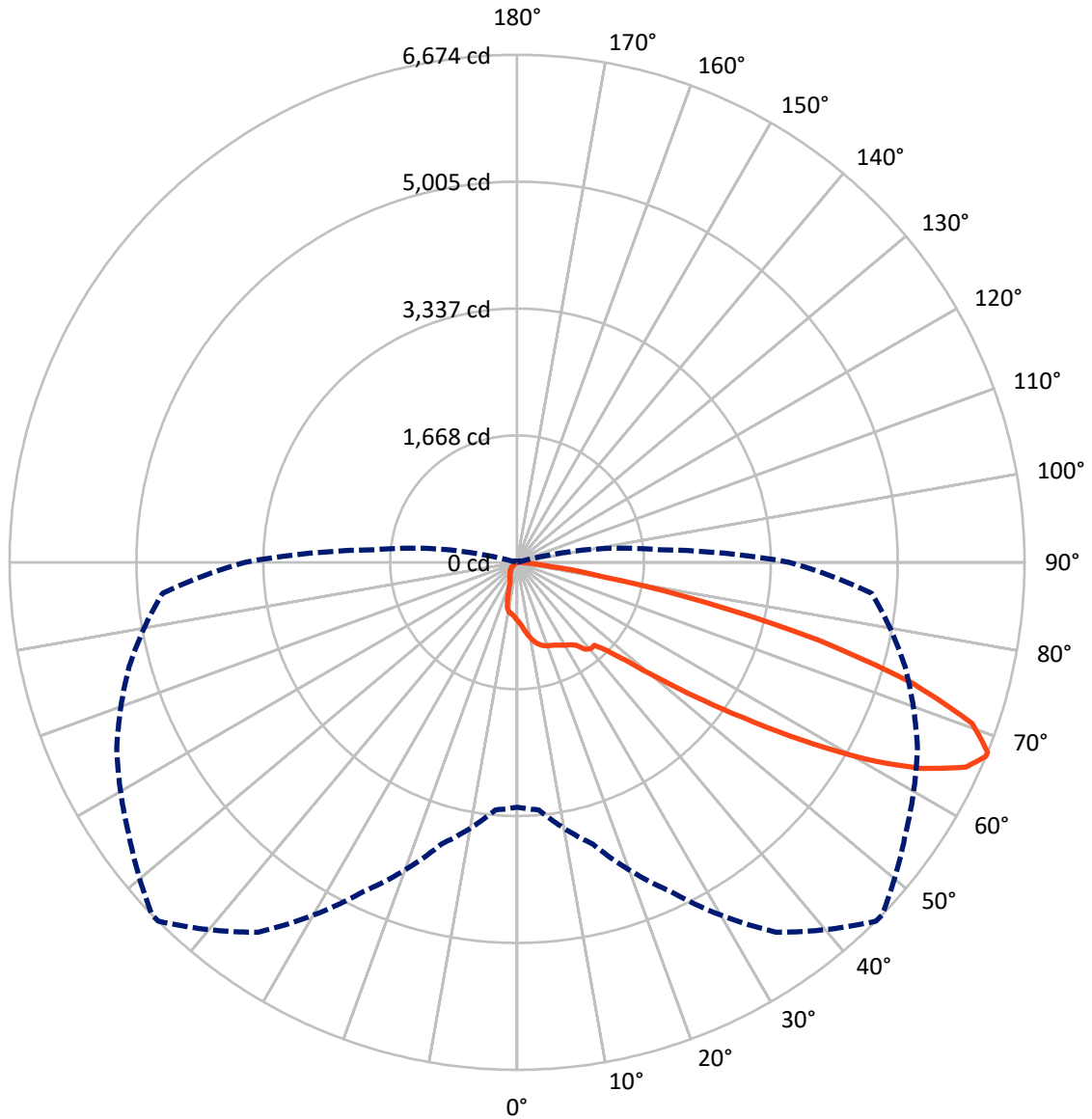
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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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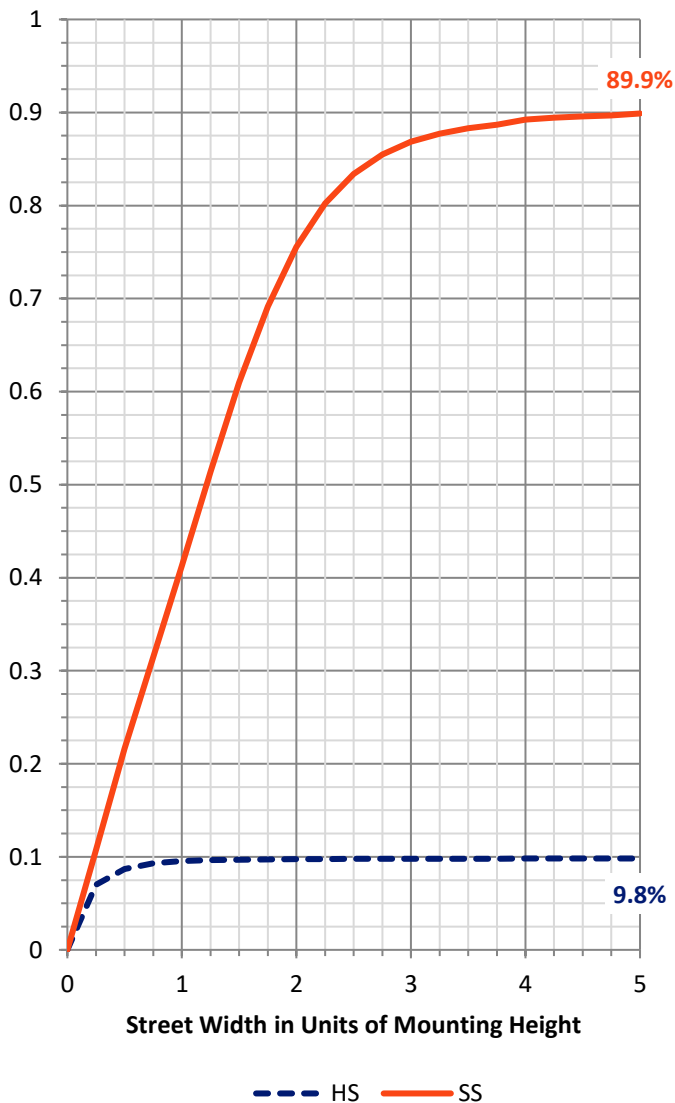
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	802.7	0.0	802.7
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	7298.3	0.0	7298.3
	% Fixture	90.1	0.0	90.1
Total	Lumens	8101.0	0.0	8101.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	0.9
10°-20°	232.5	2.9
20°-30°	371.8	4.6
30°-40°	535.2	6.6
40°-50°	938.9	11.6
50°-60°	1978.2	24.4
60°-70°	2735.6	33.8
70°-80°	1145.3	14.1
80°-90°	86.6	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°	8101.0	100.0
0°-180°	8101.0	100.0

Coefficient of Utilization



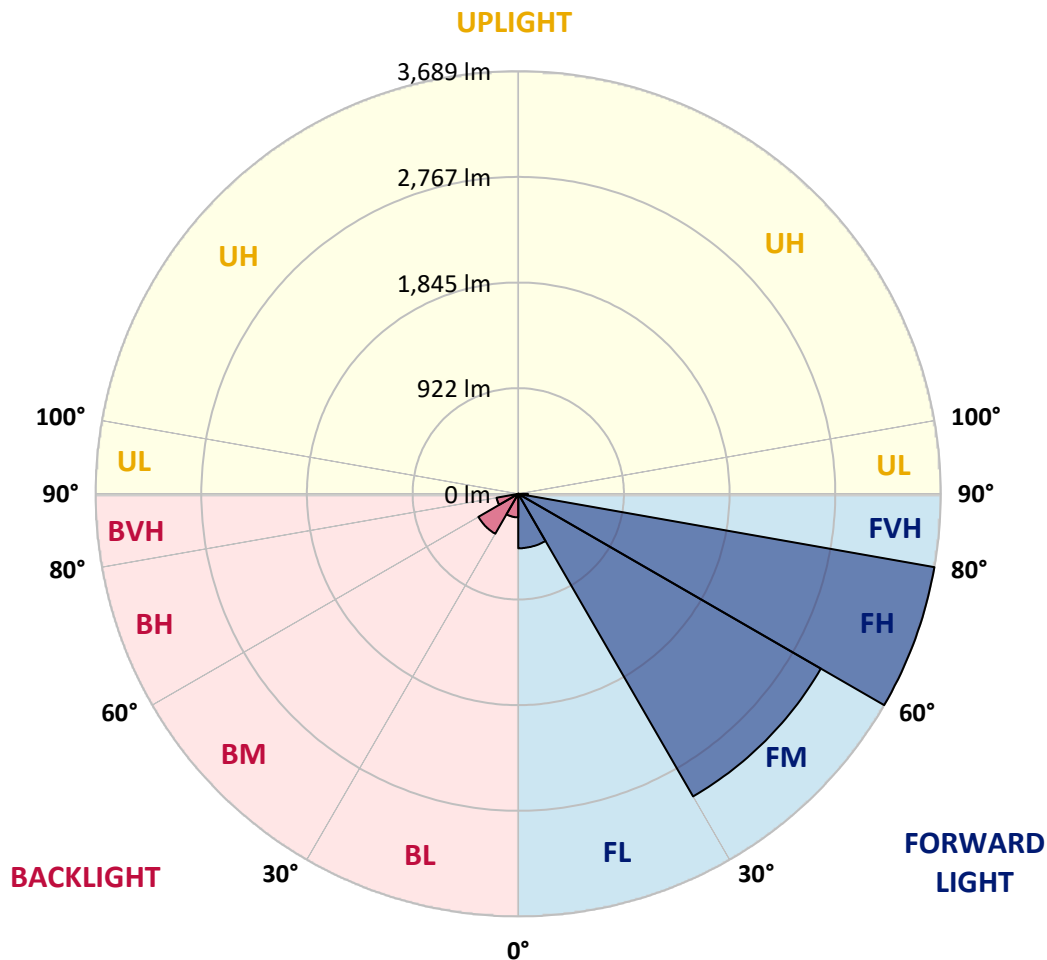
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	475.5	5.9			
FM (30°-60°)	3050.1	37.7			
FH (60°-80°)	3689.0	45.5			G2/5000
FVH (80°-90°)	83.7	1.0			G1/100
BL (0°-30°)	205.7	2.5	B1/500		
BM (30°-60°)	402.2	5.0	B1/1000		
BH (60°-80°)	191.9	2.4	B1/500		G1/500
BVH (80°-90°)	2.9	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1
2.5°	852.9	838.0	835.0	832.0	823.0	811.0	814.0	805.0	790.1	781.1	772.1
5°	957.7	942.7	936.7	918.8	900.8	873.9	873.9	849.9	823.0	799.1	775.1
7.5°	1065.4	1053.4	1041.5	1014.5	987.6	951.7	948.7	912.8	870.9	835.0	796.1
10°	1155.2	1146.2	1131.2	1098.3	1062.4	1023.5	1014.5	981.6	927.7	879.9	829.0
12.5°	1227.0	1218.0	1197.1	1164.2	1119.3	1080.4	1077.4	1035.5	981.6	930.7	867.9
15°	1280.9	1265.9	1242.0	1206.1	1161.2	1125.3	1119.3	1083.4	1032.5	975.6	900.8
17.5°	1289.9	1280.9	1259.9	1221.0	1182.1	1152.2	1149.2	1122.3	1077.4	1017.5	939.7
20°	1265.9	1262.9	1245.0	1215.0	1185.1	1170.2	1167.2	1149.2	1113.3	1059.4	981.6
22.5°	1230.0	1227.0	1215.0	1200.1	1188.1	1185.1	1185.1	1179.1	1158.2	1107.3	1035.5
25°	1206.1	1203.1	1197.1	1188.1	1188.1	1206.1	1209.1	1215.0	1197.1	1158.2	1080.4
27.5°	1209.1	1203.1	1197.1	1188.1	1200.1	1233.0	1236.0	1251.0	1236.0	1200.1	1131.2
30°	1251.0	1242.0	1224.0	1203.1	1218.0	1262.9	1265.9	1283.9	1271.9	1254.0	1188.1
32.5°	1316.8	1310.8	1274.9	1239.0	1248.0	1292.9	1298.8	1331.8	1346.7	1319.8	1239.0
35°	1412.6	1391.6	1346.7	1310.8	1304.8	1337.7	1346.7	1400.6	1439.5	1373.7	1268.9
37.5°	1490.4	1472.4	1400.6	1343.7	1376.7	1451.5	1454.5	1520.3	1487.4	1379.6	1316.8
40°	1753.7	1750.7	1625.0	1445.5	1409.6	1493.4	1505.3	1517.3	1502.3	1448.5	1421.5
42.5°	2178.7	2142.8	2002.1	1726.8	1481.4	1490.4	1496.4	1559.2	1637.0	1613.1	1622.1
45°	2639.6	2609.7	2451.0	2103.9	1726.8	1652.0	1658.0	1759.7	1909.4	1939.3	1987.2
47.5°	3064.5	3016.7	2926.9	2576.7	2145.8	1927.3	1939.3	2062.0	2310.4	2376.2	2451.0
50°	3423.7	3390.8	3307.0	3076.5	2660.5	2361.3	2373.2	2475.0	2798.2	2902.9	2998.7
52.5°	3944.4	3899.5	3737.9	3630.2	3315.9	2926.9	2899.9	3007.7	3378.8	3447.6	3576.3
55°	4423.2	4330.5	4234.7	4189.8	4058.1	3603.2	3594.3	3615.2	3923.5	3959.4	4189.8
57.5°	4626.7	4608.8	4689.6	4839.2	4869.2	4399.3	4360.4	4279.6	4522.0	4519.0	4788.4
60°	4755.4	4755.4	4970.9	5342.0	5581.4	5249.2	5195.4	4944.0	5030.8	5033.8	5282.2
62.5°	4674.6	4695.6	5030.8	5590.4	6072.2	5970.5	5934.6	5512.6	5506.6	5437.8	5524.6
65°	4174.8	4210.8	4749.4	5452.7	6251.8	6491.2	6476.2	5997.4	5823.8	5572.4	5377.9
67°	3405.7	3471.6	4124.0	4955.9	6048.3	6670.8	6673.8	6206.9	5826.8	5348.0	4860.2
67.5°	3220.2	3268.1	3833.7	4776.4	5937.6	6673.8	6673.8	6233.8	5808.9	5279.2	4680.6
70°	2053.0	2065.0	2681.5	3696.0	5072.7	6350.6	6374.5	6030.3	5291.1	4273.6	3286.0
72.5°	1014.5	987.6	1415.6	2379.2	3806.7	5434.8	5497.6	5150.5	4186.8	2792.2	1735.8
75°	398.0	425.0	616.5	1265.9	2385.2	4097.0	4144.9	3746.9	2693.4	1439.5	685.3
77.5°	176.6	176.6	263.4	568.6	1254.0	2513.9	2537.8	2286.4	1421.5	592.6	209.5
80°	95.8	101.8	137.7	248.4	631.5	1155.2	1259.9	1134.2	643.4	260.4	71.8
82.5°	47.9	50.9	83.8	140.7	317.2	436.9	460.9	481.8	296.3	161.6	29.9
85°	18.0	20.9	44.9	80.8	143.7	146.6	146.6	188.5	161.6	122.7	15.0
87.5°	3.0	6.0	20.9	32.9	56.9	50.9	44.9	59.9	89.8	77.8	9.0
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°	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1	766.1
2.5°	766.1	760.2	748.2	739.2	733.2	727.2	721.2	721.2	718.3	718.3	721.2
5°	766.1	754.2	730.2	715.3	703.3	694.3	688.3	688.3	685.3	688.3	691.3
7.5°	781.1	763.1	730.2	703.3	688.3	673.4	667.4	664.4	664.4	667.4	664.4
10°	805.0	781.1	739.2	703.3	682.3	661.4	628.5	598.5	571.6	559.6	556.6
12.5°	835.0	805.0	754.2	712.3	679.3	607.5	517.7	460.9	425.0	407.0	401.0
15°	867.9	832.0	772.1	724.2	634.5	499.8	383.1	320.2	299.3	302.3	305.3
17.5°	903.8	864.9	799.1	718.3	544.7	371.1	281.3	266.4	275.3	284.3	284.3
20°	939.7	897.8	826.0	673.4	428.0	275.3	251.4	254.4	263.4	272.3	272.3
22.5°	987.6	942.7	852.9	595.6	317.2	239.4	239.4	245.4	251.4	260.4	260.4
25°	1038.5	993.6	870.9	499.8	236.4	224.5	227.4	233.4	239.4	248.4	248.4
27.5°	1092.3	1047.5	867.9	386.1	206.5	206.5	209.5	218.5	224.5	233.4	233.4
30°	1152.2	1113.3	835.0	281.3	191.5	188.5	188.5	197.5	206.5	212.5	215.5
32.5°	1203.1	1170.2	778.1	212.5	179.6	173.6	170.6	173.6	182.6	188.5	191.5
35°	1245.0	1233.0	694.3	182.6	167.6	158.6	152.6	149.6	152.6	152.6	155.6
37.5°	1322.8	1325.8	595.6	170.6	158.6	146.6	134.7	125.7	119.7	116.7	113.7
40°	1469.4	1466.4	490.8	161.6	149.6	134.7	116.7	104.7	89.8	83.8	83.8
42.5°	1675.9	1631.0	374.1	152.6	140.7	122.7	98.8	80.8	65.8	62.8	62.8
45°	2047.0	1861.5	281.3	146.6	131.7	107.7	80.8	59.9	50.9	47.9	47.9
47.5°	2457.0	2127.8	224.5	137.7	122.7	95.8	62.8	47.9	38.9	38.9	38.9
50°	2908.9	2382.2	188.5	128.7	107.7	80.8	50.9	38.9	35.9	32.9	35.9
52.5°	3402.7	2582.7	164.6	116.7	92.8	65.8	41.9	35.9	29.9	29.9	29.9
55°	3845.6	2717.4	137.7	101.8	77.8	53.9	38.9	29.9	26.9	23.9	20.9
57.5°	4246.7	2789.2	110.7	86.8	59.9	44.9	32.9	23.9	20.9	15.0	15.0
60°	4453.2	2723.4	86.8	68.8	47.9	35.9	26.9	20.9	15.0	9.0	9.0
62.5°	4486.1	2552.8	68.8	53.9	41.9	29.9	20.9	15.0	9.0	6.0	6.0
65°	4198.8	2253.5	56.9	44.9	32.9	23.9	18.0	12.0	6.0	3.0	3.0
67°	3684.0	1939.3	50.9	38.9	29.9	20.9	15.0	9.0	6.0	3.0	0.0
67.5°	3582.3	1882.4	47.9	38.9	29.9	20.9	15.0	9.0	6.0	3.0	0.0
70°	2352.3	1301.8	44.9	35.9	26.9	18.0	12.0	9.0	3.0	0.0	0.0
72.5°	1283.9	655.4	41.9	32.9	23.9	18.0	12.0	6.0	3.0	0.0	0.0
75°	469.9	248.4	35.9	29.9	20.9	18.0	12.0	6.0	3.0	0.0	0.0
77.5°	158.6	86.8	32.9	29.9	23.9	18.0	12.0	6.0	3.0	0.0	0.0
80°	53.9	38.9	26.9	23.9	18.0	15.0	12.0	6.0	3.0	0.0	0.0
82.5°	20.9	12.0	9.0	9.0	9.0	12.0	12.0	9.0	3.0	0.0	0.0
85°	9.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0
87.5°	9.0	6.0	3.0	3.0	3.0	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)