

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: P573605

Luminaire Tested: **ARCH-S-PA2-90-830-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573605  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-90-830-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10166 lumens  
Efficiency: N/A  
Efficacy: 110.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

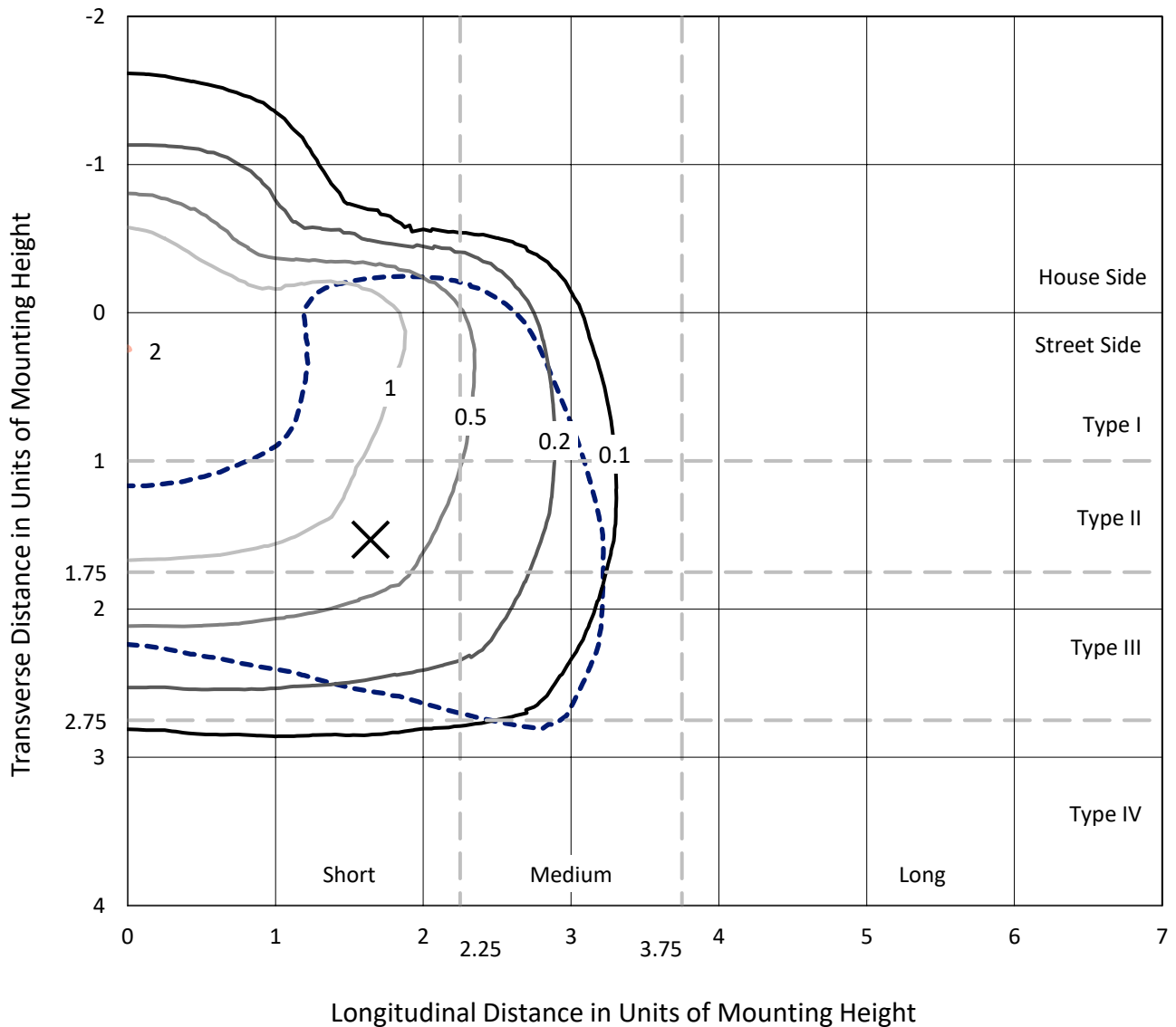
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

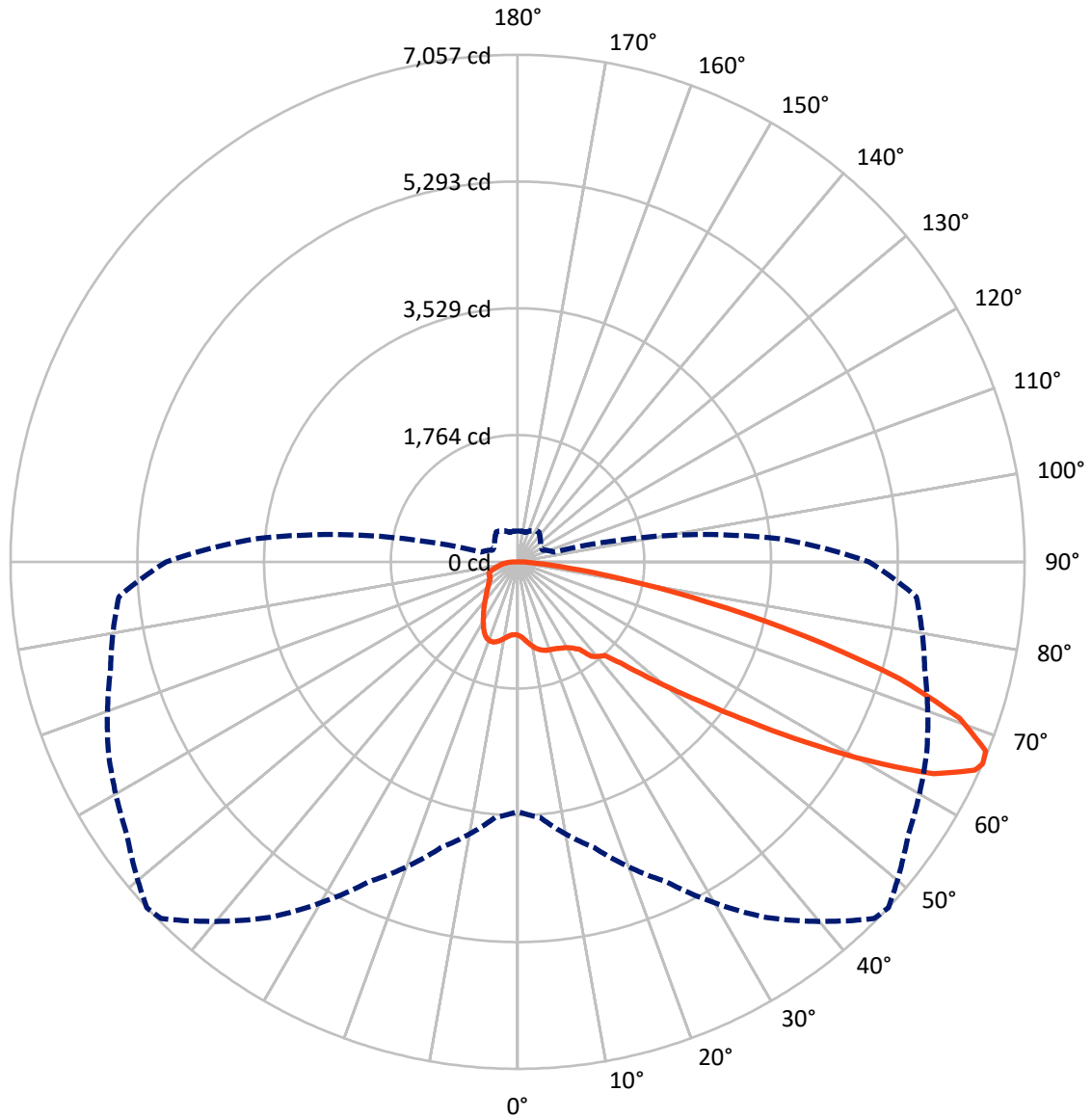
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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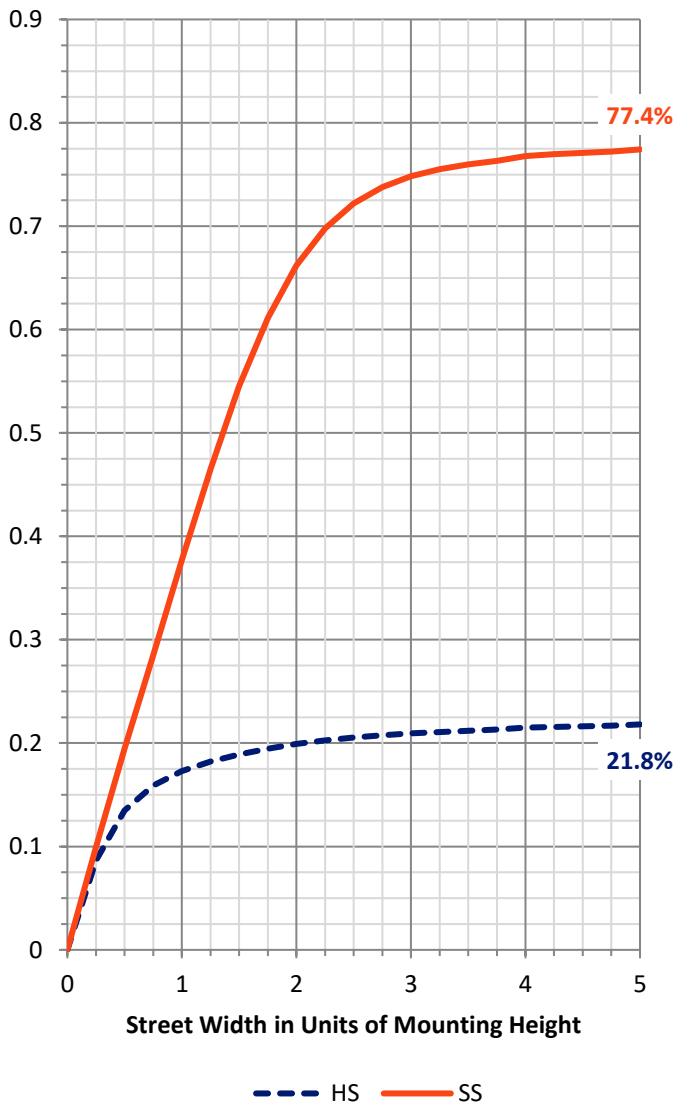
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2260.2	0.0	2260.2
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	7905.8	0.0	7905.8
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	10166.0	0.0	10166.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.0	1.0
10°-20°	341.2	3.4
20°-30°	569.1	5.6
30°-40°	826.4	8.1
40°-50°	1263.9	12.4
50°-60°	2389.0	23.5
60°-70°	3087.0	30.4
70°-80°	1387.6	13.6
80°-90°	197.9	1.9
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°	10166.0	100.0
0°-180°	10166.0	100.0



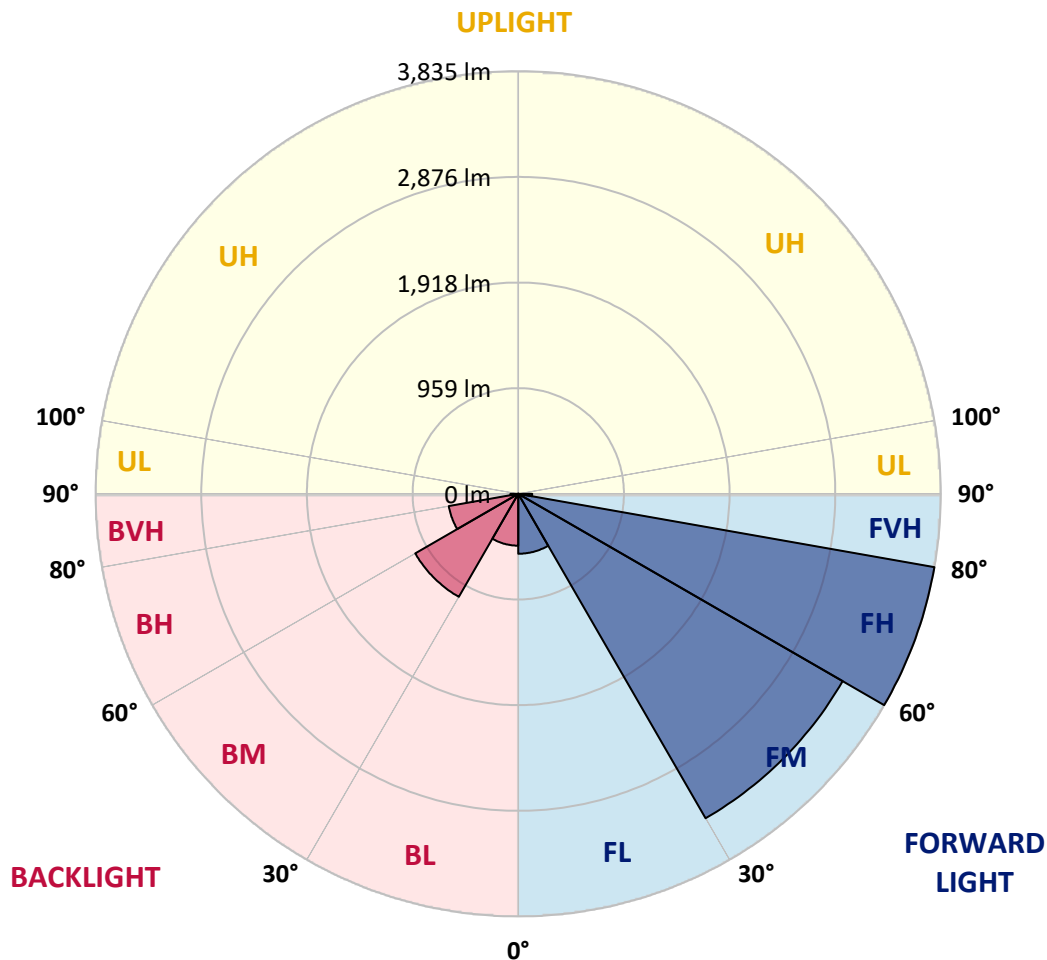
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	543.9	5.4			
FM (30°-60°)	3399.7	33.4			
FH (60°-80°)	3835.0	37.7			G2/5000
FVH (80°-90°)	127.2	1.3			G2/225
BL (0°-30°)	470.4	4.6	B1/500		
BM (30°-60°)	1079.6	10.6	B2/2500		
BH (60°-80°)	639.5	6.3	B2/1000		G2/1000
BVH (80°-90°)	70.7	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0
2.5°	1080.0	1071.7	1066.2	1063.4	1057.9	1046.9	1046.9	1044.1	1033.0	1027.5	1024.8
5°	1165.6	1160.1	1146.3	1135.2	1118.7	1096.6	1093.8	1077.2	1055.1	1038.6	1027.5
7.5°	1248.5	1243.0	1229.2	1212.6	1185.0	1157.3	1149.1	1127.0	1091.0	1066.2	1046.9
10°	1320.3	1312.0	1295.4	1273.3	1243.0	1212.6	1204.3	1179.4	1143.5	1107.6	1074.5
12.5°	1367.3	1361.7	1342.4	1314.8	1281.6	1251.2	1245.7	1223.6	1187.7	1149.1	1107.6
15°	1389.4	1386.6	1364.5	1336.9	1303.7	1278.9	1276.1	1256.8	1226.4	1187.7	1140.8
17.5°	1383.8	1381.1	1361.7	1334.1	1309.3	1295.4	1295.4	1281.6	1256.8	1223.6	1173.9
20°	1356.2	1356.2	1339.6	1320.3	1306.5	1303.7	1303.7	1301.0	1284.4	1256.8	1207.1
22.5°	1328.6	1328.6	1317.5	1303.7	1301.0	1312.0	1314.8	1320.3	1314.8	1292.7	1248.5
25°	1334.1	1331.4	1317.5	1301.0	1303.7	1328.6	1334.1	1347.9	1345.2	1328.6	1289.9
27.5°	1394.9	1392.1	1356.2	1323.1	1320.3	1350.7	1356.2	1375.5	1375.5	1361.7	1336.9
30°	1546.8	1552.3	1486.0	1403.2	1361.7	1381.1	1386.6	1408.7	1419.7	1425.3	1405.9
32.5°	1778.8	1770.5	1671.1	1535.8	1444.6	1425.3	1433.6	1452.9	1491.6	1502.6	1455.6
35°	2013.6	2019.1	1922.5	1751.2	1577.2	1505.4	1499.8	1527.5	1585.5	1535.8	1452.9
37.5°	2231.8	2223.5	2110.3	1925.2	1751.2	1668.3	1671.1	1660.0	1610.3	1510.9	1472.2
40°	2469.4	2447.3	2353.3	2115.8	1894.8	1756.7	1731.9	1637.9	1596.5	1555.1	1549.6
42.5°	2704.1	2706.9	2629.6	2394.8	2066.1	1820.3	1781.6	1684.9	1712.5	1704.2	1698.7
45°	2999.7	2999.7	2922.3	2704.1	2336.8	2057.8	2005.3	1889.3	1933.5	1966.6	2032.9
47.5°	3270.4	3253.8	3231.7	3046.6	2690.3	2367.2	2345.1	2212.5	2328.5	2430.7	2566.0
50°	3557.6	3535.5	3521.7	3408.5	3154.4	2836.7	2770.4	2632.3	2886.4	3077.0	3328.4
52.5°	4005.1	3966.4	3894.6	3831.1	3731.7	3364.3	3281.4	3179.2	3507.9	3748.2	4262.0
55°	4408.4	4375.2	4306.2	4353.1	4339.3	4005.1	3933.3	3836.6	4192.9	4485.7	5074.1
57.5°	4557.5	4560.3	4654.2	4905.6	5038.1	4844.8	4742.6	4645.9	4947.0	5082.3	5612.7
60°	4626.6	4618.3	4861.4	5270.2	5701.1	5759.1	5629.2	5430.4	5543.6	5551.9	6068.4
62.5°	4477.4	4499.5	4833.7	5422.1	6098.8	6515.9	6496.6	6148.5	6043.6	5927.6	6190.0
65°	3911.2	3941.6	4433.2	5151.4	6162.3	6974.4	6993.7	6587.7	6294.9	5971.7	5844.7
66°	3480.3	3571.4	4118.4	4916.6	6046.3	7021.4	7057.3	6634.7	6283.9	5866.8	5571.2
67.5°	2919.6	2914.1	3524.5	4400.1	5723.2	6979.9	7026.9	6568.4	6134.7	5557.4	5024.3
70°	1787.1	1842.3	2367.2	3284.2	4737.1	6463.4	6526.9	6101.6	5491.1	4706.7	3715.1
72.5°	917.0	1008.2	1353.4	2135.1	3438.9	5342.0	5557.4	5123.8	4488.5	3405.7	2267.7
75°	486.1	480.6	638.1	1157.3	2195.9	4007.9	4121.1	3842.1	3101.9	2030.2	1154.6
77.5°	259.6	273.5	334.2	593.9	1207.1	2560.5	2704.1	2477.6	1767.8	1038.6	552.4
80°	176.8	185.1	226.5	334.2	654.6	1389.4	1521.9	1320.3	925.3	491.7	259.6
82.5°	113.2	118.8	154.7	207.2	392.2	674.0	709.9	676.7	453.0	279.0	157.4
85°	69.1	71.8	93.9	132.6	245.8	273.5	284.5	287.3	254.1	182.3	85.6
87.5°	33.1	35.9	52.5	66.3	116.0	99.4	91.2	93.9	140.9	107.7	38.7
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°	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0	1022.0
2.5°	1022.0	1019.2	1013.7	1010.9	1013.7	1013.7	1013.7	1016.5	1022.0	1022.0	1024.8
5°	1022.0	1016.5	1010.9	1010.9	1016.5	1022.0	1027.5	1038.6	1044.1	1046.9	1046.9
7.5°	1035.8	1030.3	1024.8	1024.8	1033.0	1044.1	1055.1	1068.9	1082.8	1093.8	1093.8
10°	1063.4	1055.1	1049.6	1052.4	1066.2	1080.0	1093.8	1110.4	1124.2	1138.0	1138.0
12.5°	1093.8	1085.5	1077.2	1082.8	1102.1	1118.7	1132.5	1140.8	1154.6	1165.6	1165.6
15°	1124.2	1110.4	1107.6	1118.7	1138.0	1149.1	1154.6	1154.6	1160.1	1171.1	1171.1
17.5°	1157.3	1143.5	1140.8	1151.8	1168.4	1168.4	1157.3	1149.1	1146.3	1154.6	1157.3
20°	1190.5	1176.7	1176.7	1185.0	1182.2	1162.9	1143.5	1129.7	1118.7	1127.0	1129.7
22.5°	1231.9	1218.1	1212.6	1201.5	1176.7	1138.0	1107.6	1091.0	1082.8	1088.3	1093.8
25°	1273.3	1262.3	1248.5	1209.8	1151.8	1091.0	1052.4	1038.6	1041.3	1052.4	1057.9
27.5°	1325.8	1320.3	1287.2	1204.3	1107.6	1024.8	986.1	983.3	994.4	1010.9	1019.2
30°	1389.4	1381.1	1323.1	1187.7	1046.9	947.4	919.8	925.3	941.9	955.7	964.0
32.5°	1433.6	1428.0	1339.6	1149.1	972.3	878.4	856.3	856.3	864.6	883.9	892.2
35°	1447.4	1469.5	1350.7	1091.0	883.9	817.6	795.5	781.7	781.7	798.3	803.8
37.5°	1494.3	1544.0	1356.2	1013.7	812.1	762.4	734.7	709.9	701.6	698.8	698.8
40°	1602.0	1660.0	1353.4	914.3	743.0	707.1	674.0	646.3	624.2	593.9	596.6
42.5°	1789.9	1834.1	1345.2	809.3	682.2	657.4	624.2	591.1	555.2	522.0	519.3
45°	2151.7	2085.4	1323.1	718.2	627.0	613.2	582.8	544.1	499.9	469.6	469.6
47.5°	2723.5	2541.2	1309.3	632.5	577.3	574.5	546.9	505.5	461.3	439.2	436.4
50°	3507.9	3170.9	1331.4	571.8	533.1	541.4	519.3	480.6	444.7	425.4	422.6
52.5°	4408.4	3847.7	1356.2	533.1	499.9	516.5	505.5	469.6	433.7	417.1	414.3
55°	5104.4	4397.3	1320.3	497.2	466.8	491.7	491.7	458.5	428.1	411.6	411.6
57.5°	5593.3	4618.3	1196.0	464.0	439.2	469.6	477.9	453.0	425.4	419.8	419.8
60°	5803.3	4607.3	977.8	433.7	419.8	447.5	469.6	447.5	430.9	444.7	447.5
62.5°	5690.0	4366.9	759.6	411.6	406.0	441.9	477.9	469.6	450.2	461.3	466.8
65°	5179.0	3944.3	571.8	392.2	389.5	444.7	499.9	483.4	436.4	439.2	441.9
66°	4891.8	3659.8	524.8	386.7	383.9	447.5	511.0	477.9	425.4	430.9	428.1
67.5°	4278.6	3212.4	461.3	375.7	372.9	447.5	524.8	466.8	411.6	419.8	411.6
70°	3137.8	2273.2	395.0	361.8	356.3	439.2	522.0	444.7	381.2	375.7	361.8
72.5°	1820.3	1375.5	350.8	345.3	331.5	386.7	488.9	408.8	348.0	331.5	317.6
75°	894.9	698.8	312.1	325.9	290.0	339.7	441.9	378.4	320.4	298.3	290.0
77.5°	411.6	353.6	281.7	298.3	256.9	292.8	403.3	345.3	284.5	251.4	243.1
80°	223.7	221.0	237.5	248.6	215.4	256.9	356.3	301.1	240.3	204.4	193.3
82.5°	138.1	140.9	174.0	190.6	168.5	223.7	314.9	251.4	182.3	143.6	146.4
85°	71.8	80.1	116.0	127.1	110.5	165.7	237.5	168.5	102.2	74.6	74.6
87.5°	24.9	33.1	58.0	69.1	60.8	99.4	149.2	80.1	22.1	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)