

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: P573497

Luminaire Tested: **ARCH-S-PA2-80-750-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573497  
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-PA2-80-750-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11791 lumens  
Efficiency: N/A  
Efficacy: 142.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

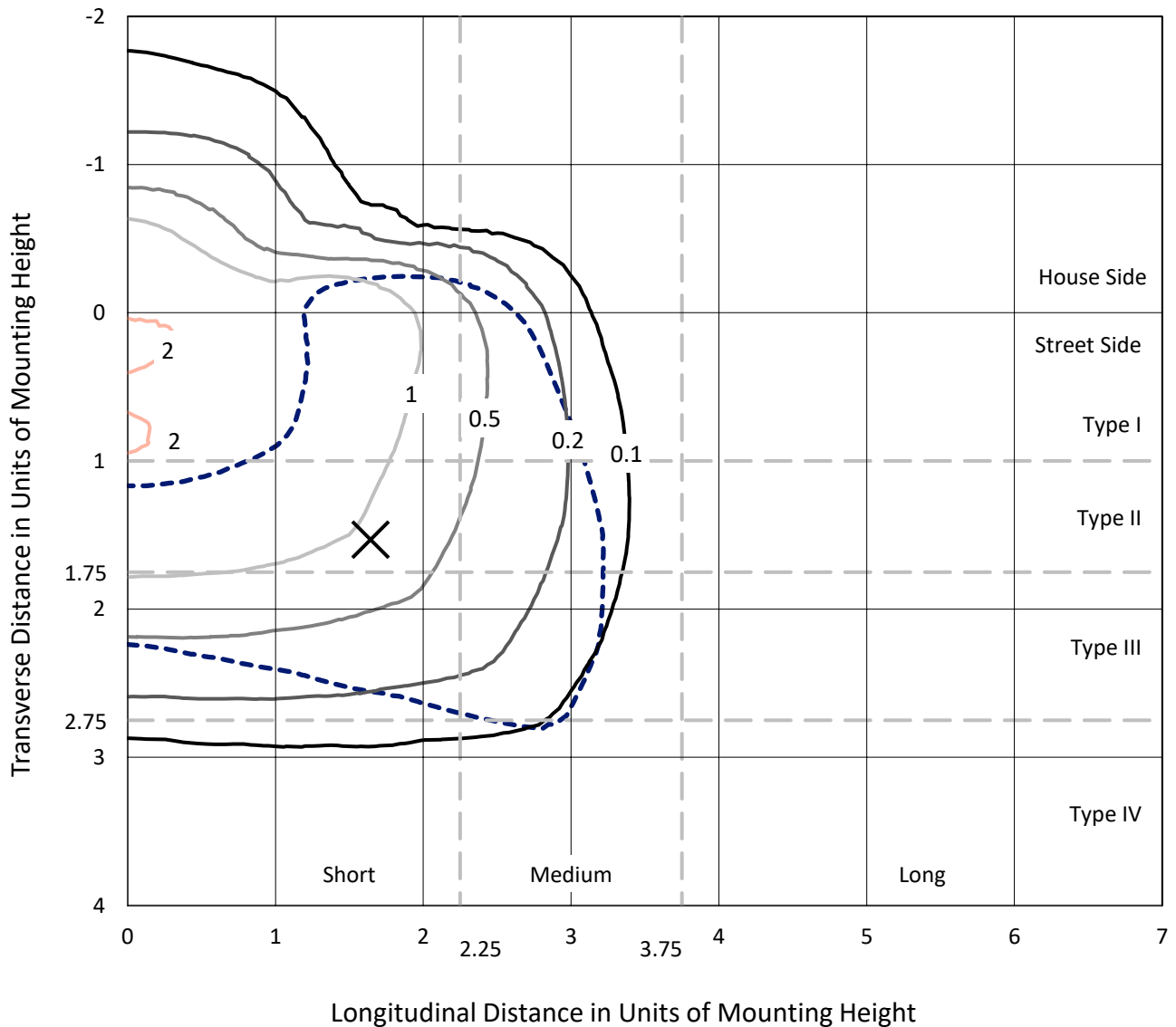
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

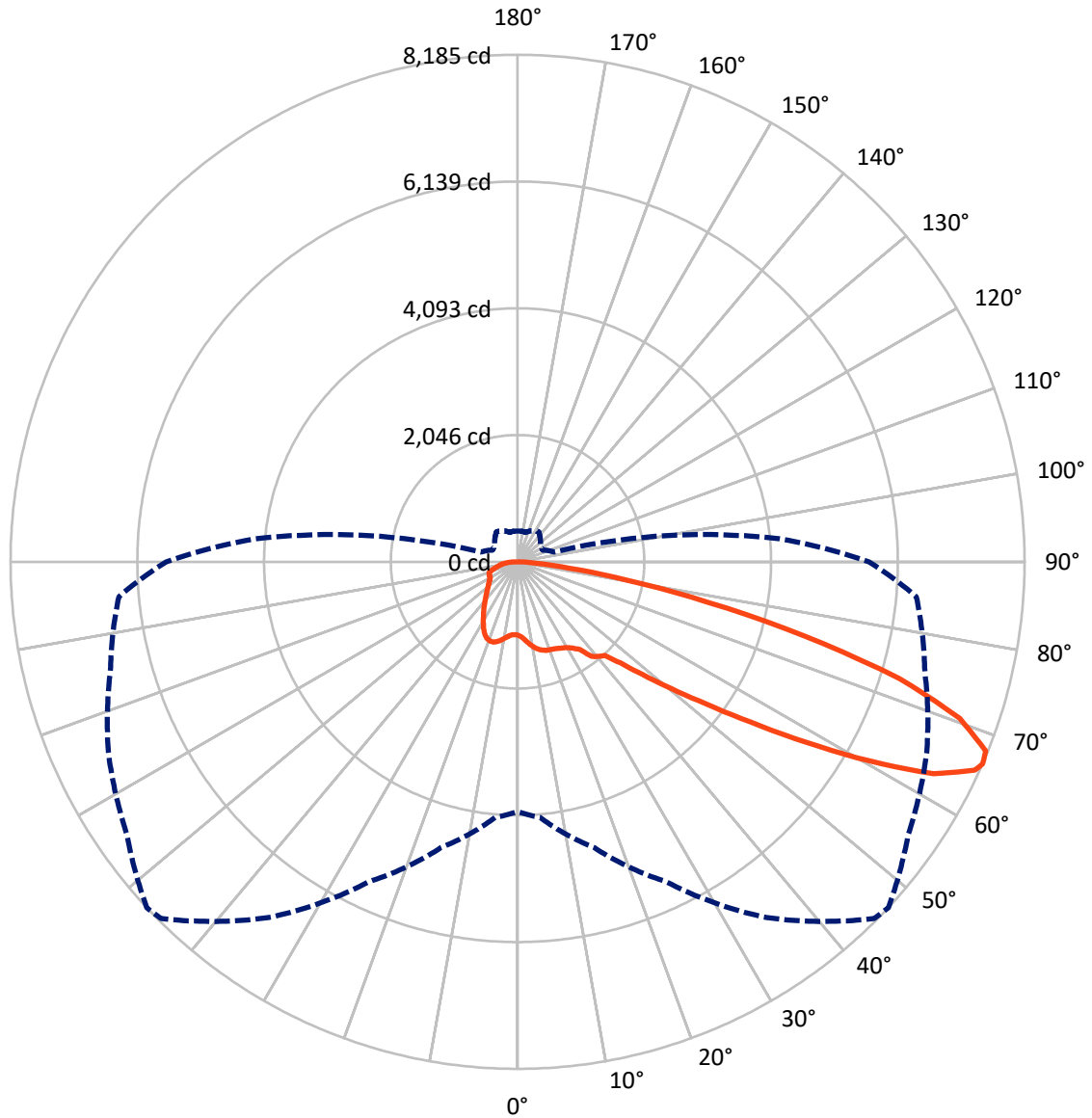
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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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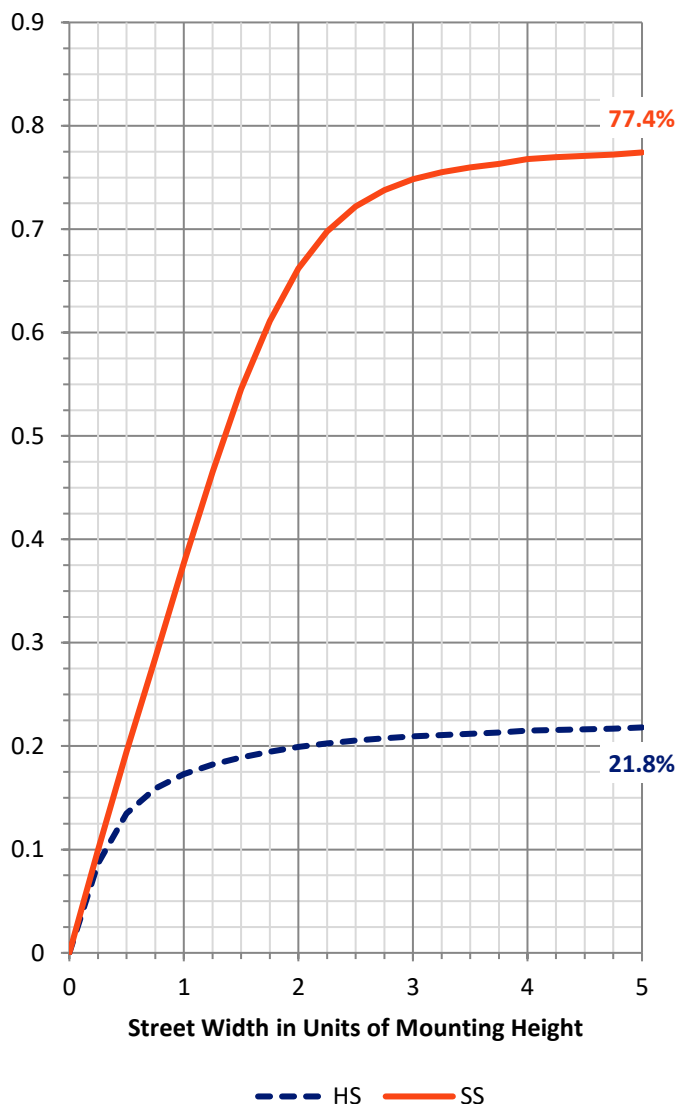
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2621.5	0.0	2621.5
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	9169.5	0.0	9169.5
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	11791.0	0.0	11791.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.6	1.0
10°-20°	395.8	3.4
20°-30°	660.0	5.6
30°-40°	958.5	8.1
40°-50°	1465.9	12.4
50°-60°	2770.9	23.5
60°-70°	3580.4	30.4
70°-80°	1609.4	13.6
80°-90°	229.5	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°	11791.0	100.0
0°-180°	11791.0	100.0

**Coefficient of Utilization**



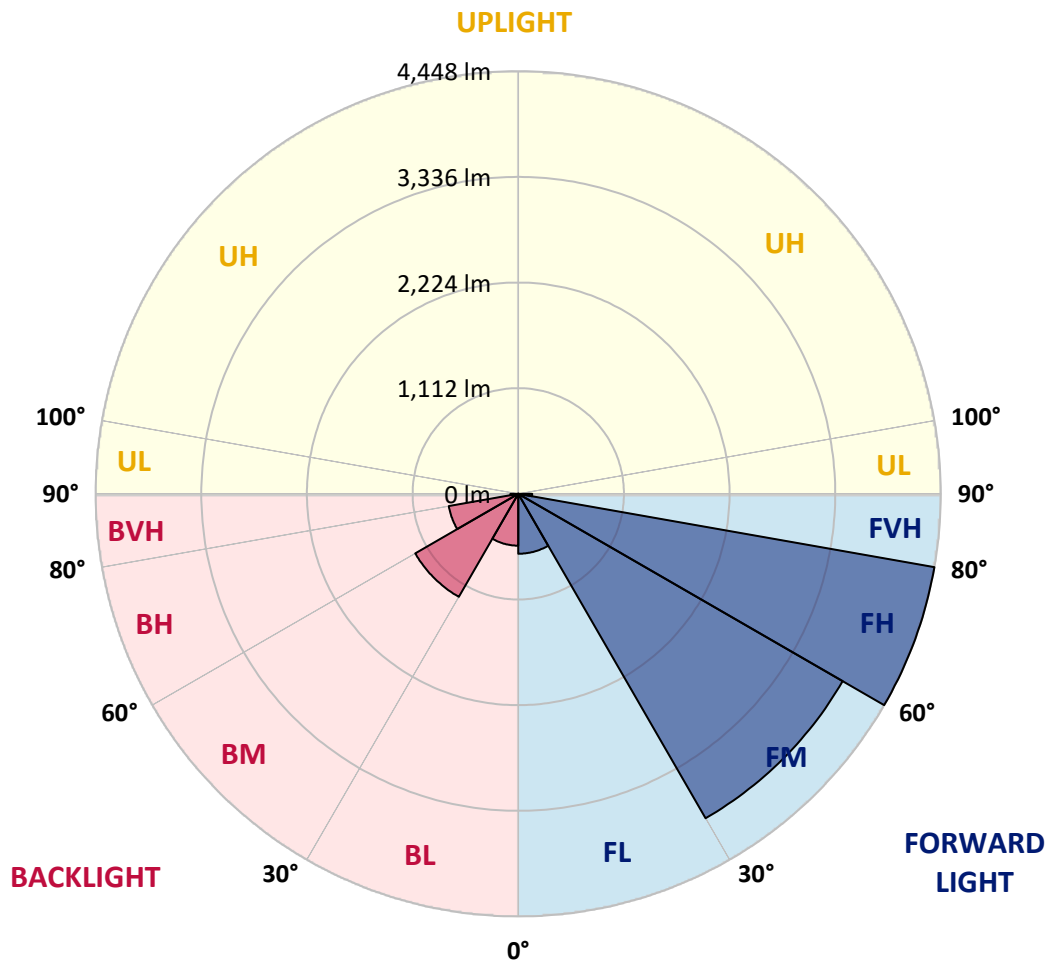
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	630.9	5.4			
FM (30°-60°)	3943.1	33.4			
FH (60°-80°)	4448.0	37.7			G2/5000
FVH (80°-90°)	147.5	1.3			G2/225
BL (0°-30°)	545.5	4.6	B2/1000		
BM (30°-60°)	1252.2	10.6	B2/2500		
BH (60°-80°)	741.7	6.3	B2/1000		G2/1000
BVH (80°-90°)	82.0	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°	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4
2.5°	1252.6	1243.0	1236.6	1233.4	1227.0	1214.2	1214.2	1211.0	1198.2	1191.8	1188.6
5°	1351.9	1345.5	1329.5	1316.7	1297.5	1271.9	1268.6	1249.4	1223.8	1204.6	1191.8
7.5°	1448.1	1441.6	1425.6	1406.4	1374.4	1342.3	1332.7	1307.1	1265.4	1236.6	1214.2
10°	1531.3	1521.7	1502.5	1476.9	1441.6	1406.4	1396.8	1368.0	1326.3	1284.7	1246.2
12.5°	1585.8	1579.4	1557.0	1524.9	1486.5	1451.3	1444.9	1419.2	1377.6	1332.7	1284.7
15°	1611.4	1608.2	1582.6	1550.6	1512.1	1483.3	1480.1	1457.7	1422.4	1377.6	1323.1
17.5°	1605.0	1601.8	1579.4	1547.4	1518.5	1502.5	1502.5	1486.5	1457.7	1419.2	1361.6
20°	1573.0	1573.0	1553.8	1531.3	1515.3	1512.1	1512.1	1508.9	1489.7	1457.7	1400.0
22.5°	1541.0	1541.0	1528.1	1512.1	1508.9	1521.7	1524.9	1531.3	1524.9	1499.3	1448.1
25°	1547.4	1544.2	1528.1	1508.9	1512.1	1541.0	1547.4	1563.4	1560.2	1541.0	1496.1
27.5°	1617.8	1614.6	1573.0	1534.6	1531.3	1566.6	1573.0	1595.4	1595.4	1579.4	1550.6
30°	1794.0	1800.5	1723.6	1627.5	1579.4	1601.8	1608.2	1633.9	1646.7	1653.1	1630.7
32.5°	2063.2	2053.5	1938.2	1781.2	1675.5	1653.1	1662.7	1685.1	1730.0	1742.8	1688.3
35°	2335.5	2341.9	2229.7	2031.1	1829.3	1746.0	1739.6	1771.6	1838.9	1781.2	1685.1
37.5°	2588.6	2578.9	2447.6	2233.0	2031.1	1935.0	1938.2	1925.4	1867.7	1752.4	1707.6
40°	2864.1	2838.4	2729.5	2454.0	2197.7	2037.5	2008.7	1899.8	1851.7	1803.7	1797.3
42.5°	3136.4	3139.6	3049.9	2777.6	2396.3	2111.2	2066.4	1954.2	1986.3	1976.7	1970.3
45°	3479.2	3479.2	3389.5	3136.4	2710.3	2386.7	2325.9	2191.3	2242.6	2281.0	2357.9
47.5°	3793.1	3773.9	3748.3	3533.6	3120.4	2745.5	2719.9	2566.1	2700.7	2819.2	2976.2
50°	4126.3	4100.7	4084.7	3953.3	3658.6	3290.2	3213.3	3053.1	3347.8	3568.9	3860.4
52.5°	4645.3	4600.5	4517.2	4443.5	4328.1	3902.1	3805.9	3687.4	4068.6	4347.4	4943.2
55°	5113.0	5074.6	4994.5	5049.0	5032.9	4645.3	4562.0	4449.9	4863.2	5202.7	5885.1
57.5°	5286.0	5289.2	5398.2	5689.7	5843.5	5619.2	5500.7	5388.6	5737.8	5894.7	6509.8
60°	5366.1	5356.5	5638.4	6112.6	6612.4	6679.6	6529.1	6298.4	6429.7	6439.4	7038.4
62.5°	5193.1	5218.8	5606.4	6288.8	7073.7	7557.4	7535.0	7131.3	7009.6	6875.1	7179.4
65°	4536.4	4571.6	5141.9	5974.8	7147.4	8089.2	8111.7	7640.7	7301.1	6926.3	6778.9
66°	4036.6	4142.3	4776.7	5702.5	7012.8	8143.7	8185.4	7695.2	7288.3	6804.6	6461.8
67.5°	3386.3	3379.9	4087.9	5103.4	6638.0	8095.6	8150.1	7618.3	7115.3	6445.8	5827.5
70°	2072.8	2136.8	2745.5	3809.2	5494.3	7496.6	7570.2	7076.9	6368.9	5459.0	4308.9
72.5°	1063.6	1169.3	1569.8	2476.4	3988.6	6195.9	6445.8	5942.8	5205.9	3950.1	2630.2
75°	563.8	557.4	740.0	1342.3	2546.9	4648.5	4779.9	4456.3	3597.7	2354.7	1339.1
77.5°	301.1	317.2	387.6	688.8	1400.0	2969.8	3136.4	2873.7	2050.3	1204.6	640.7
80°	205.0	214.6	262.7	387.6	759.3	1611.4	1765.2	1531.3	1073.2	570.3	301.1
82.5°	131.4	137.8	179.4	240.3	454.9	781.7	823.3	784.9	525.4	323.6	182.6
85°	80.1	83.3	108.9	153.8	285.1	317.2	330.0	333.2	294.7	211.4	99.3
87.5°	38.4	41.6	60.9	76.9	134.6	115.3	105.7	108.9	163.4	124.9	44.9
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°	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4
2.5°	1185.4	1182.2	1175.7	1172.5	1175.7	1175.7	1175.7	1178.9	1185.4	1185.4	1188.6
5°	1185.4	1178.9	1172.5	1172.5	1178.9	1185.4	1191.8	1204.6	1211.0	1214.2	1214.2
7.5°	1201.4	1195.0	1188.6	1188.6	1198.2	1211.0	1223.8	1239.8	1255.8	1268.6	1268.6
10°	1233.4	1223.8	1217.4	1220.6	1236.6	1252.6	1268.6	1287.9	1303.9	1319.9	1319.9
12.5°	1268.6	1259.0	1249.4	1255.8	1278.3	1297.5	1313.5	1323.1	1339.1	1351.9	1351.9
15°	1303.9	1287.9	1284.7	1297.5	1319.9	1332.7	1339.1	1339.1	1345.5	1358.4	1358.4
17.5°	1342.3	1326.3	1323.1	1335.9	1355.1	1355.1	1342.3	1332.7	1329.5	1339.1	1342.3
20°	1380.8	1364.8	1364.8	1374.4	1371.2	1348.7	1326.3	1310.3	1297.5	1307.1	1310.3
22.5°	1428.8	1412.8	1406.4	1393.6	1364.8	1319.9	1284.7	1265.4	1255.8	1262.2	1268.6
25°	1476.9	1464.1	1448.1	1403.2	1335.9	1265.4	1220.6	1204.6	1207.8	1220.6	1227.0
27.5°	1537.8	1531.3	1492.9	1396.8	1284.7	1188.6	1143.7	1140.5	1153.3	1172.5	1182.2
30°	1611.4	1601.8	1534.6	1377.6	1214.2	1098.9	1066.8	1073.2	1092.4	1108.5	1118.1
32.5°	1662.7	1656.3	1553.8	1332.7	1127.7	1018.8	993.1	993.1	1002.7	1025.2	1034.8
35°	1678.7	1704.3	1566.6	1265.4	1025.2	948.3	922.7	906.6	906.6	925.9	932.3
37.5°	1733.2	1790.8	1573.0	1175.7	941.9	884.2	852.2	823.3	813.7	810.5	810.5
40°	1858.1	1925.4	1569.8	1060.4	861.8	820.1	781.7	749.7	724.0	688.8	692.0
42.5°	2076.0	2127.2	1560.2	938.7	791.3	762.5	724.0	685.6	643.9	605.5	602.3
45°	2495.7	2418.8	1534.6	833.0	727.2	711.2	676.0	631.1	579.9	544.6	544.6
47.5°	3158.8	2947.4	1518.5	733.6	669.6	666.4	634.3	586.3	535.0	509.4	506.2
50°	4068.6	3677.8	1544.2	663.2	618.3	627.9	602.3	557.4	515.8	493.4	490.2
52.5°	5113.0	4462.7	1573.0	618.3	579.9	599.1	586.3	544.6	503.0	483.8	480.5
55°	5920.4	5100.2	1531.3	576.7	541.4	570.3	570.3	531.8	496.6	477.3	477.3
57.5°	6487.4	5356.5	1387.2	538.2	509.4	544.6	554.2	525.4	493.4	487.0	487.0
60°	6730.9	5343.7	1134.1	503.0	487.0	519.0	544.6	519.0	499.8	515.8	519.0
62.5°	6599.5	5065.0	881.0	477.3	470.9	512.6	554.2	544.6	522.2	535.0	541.4
65°	6006.9	4574.8	663.2	454.9	451.7	515.8	579.9	560.6	506.2	509.4	512.6
66°	5673.7	4244.8	608.7	448.5	445.3	519.0	592.7	554.2	493.4	499.8	496.6
67.5°	4962.5	3725.9	535.0	435.7	432.5	519.0	608.7	541.4	477.3	487.0	477.3
70°	3639.4	2636.6	458.1	419.7	413.3	509.4	605.5	515.8	442.1	435.7	419.7
72.5°	2111.2	1595.4	406.9	400.5	384.4	448.5	567.0	474.1	403.7	384.4	368.4
75°	1038.0	810.5	362.0	378.0	336.4	394.1	512.6	438.9	371.6	346.0	336.4
77.5°	477.3	410.1	326.8	346.0	297.9	339.6	467.7	400.5	330.0	291.5	281.9
80°	259.5	256.3	275.5	288.3	249.9	297.9	413.3	349.2	278.7	237.1	224.3
82.5°	160.2	163.4	201.8	221.1	195.4	259.5	365.2	291.5	211.4	166.6	169.8
85°	83.3	92.9	134.6	147.4	128.1	192.2	275.5	195.4	118.5	86.5	86.5
87.5°	28.8	38.4	67.3	80.1	70.5	115.3	173.0	92.9	25.6	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)