

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: P265819

Luminaire Tested: **ARCH-M-AF48-110-D-U-T3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265819  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-M-AF48-110-D-U-T3-7027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 720mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12375.5 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

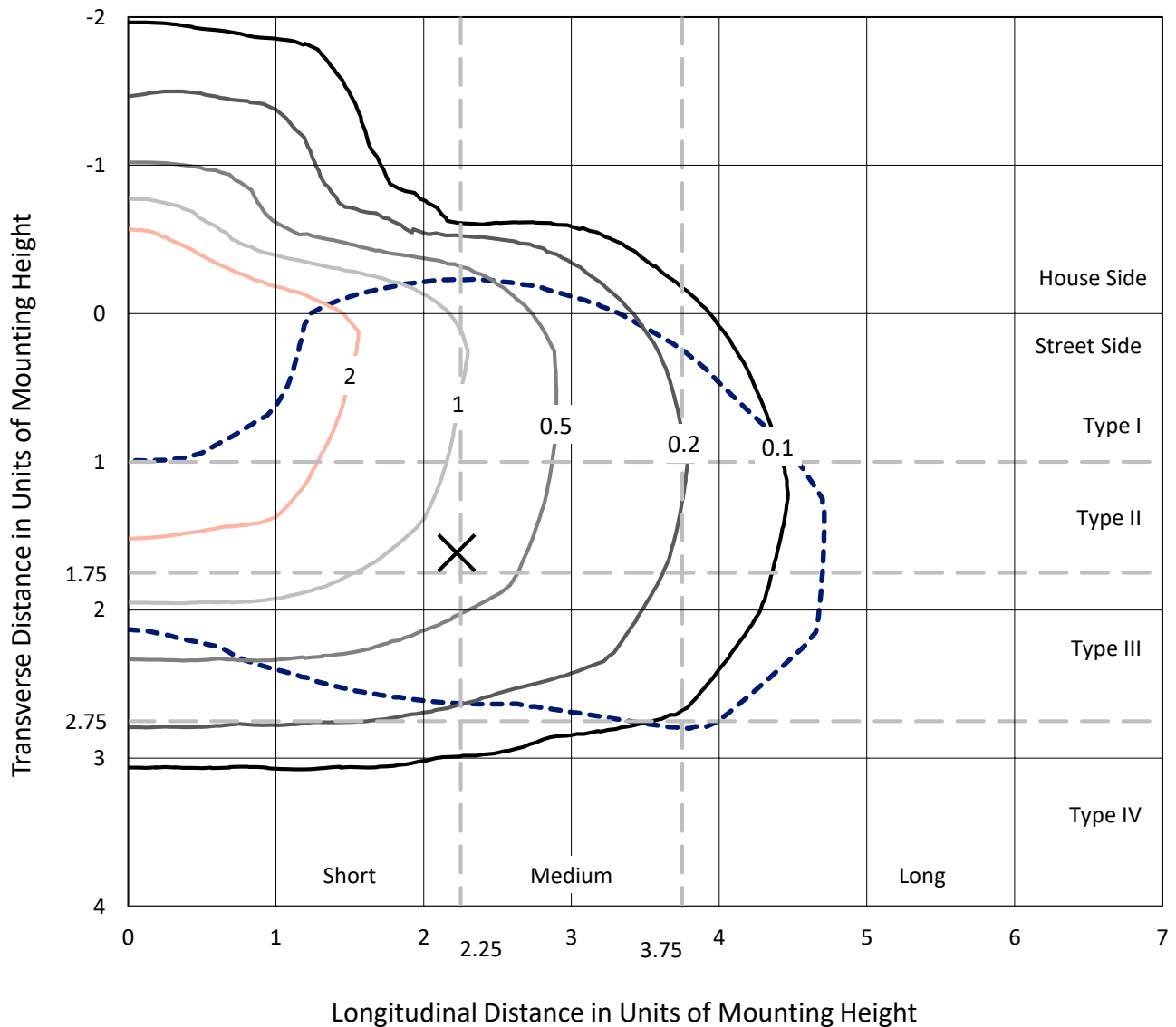
Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

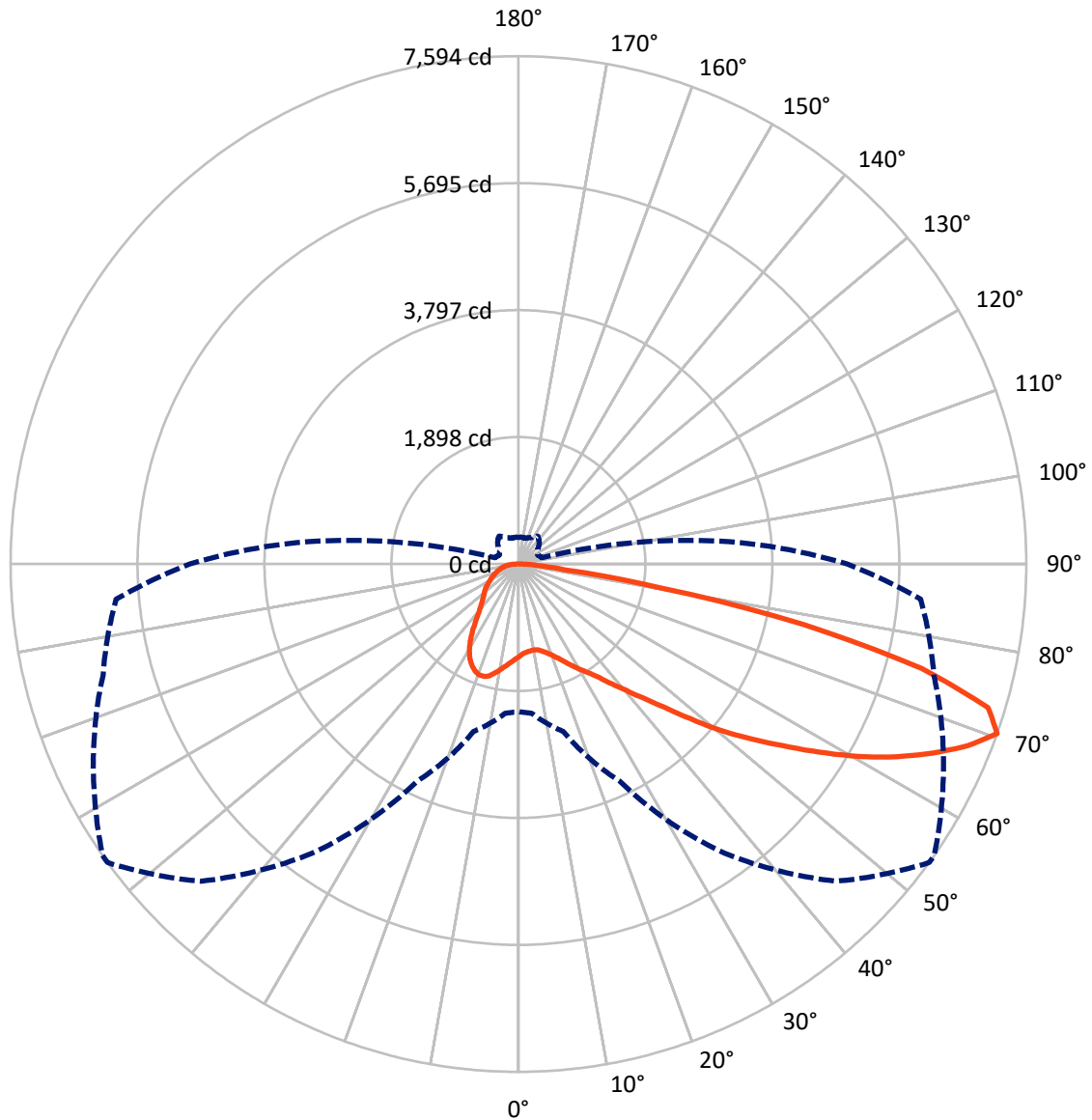


Based on 20 foot mounting height. Maximum calculated value = 4 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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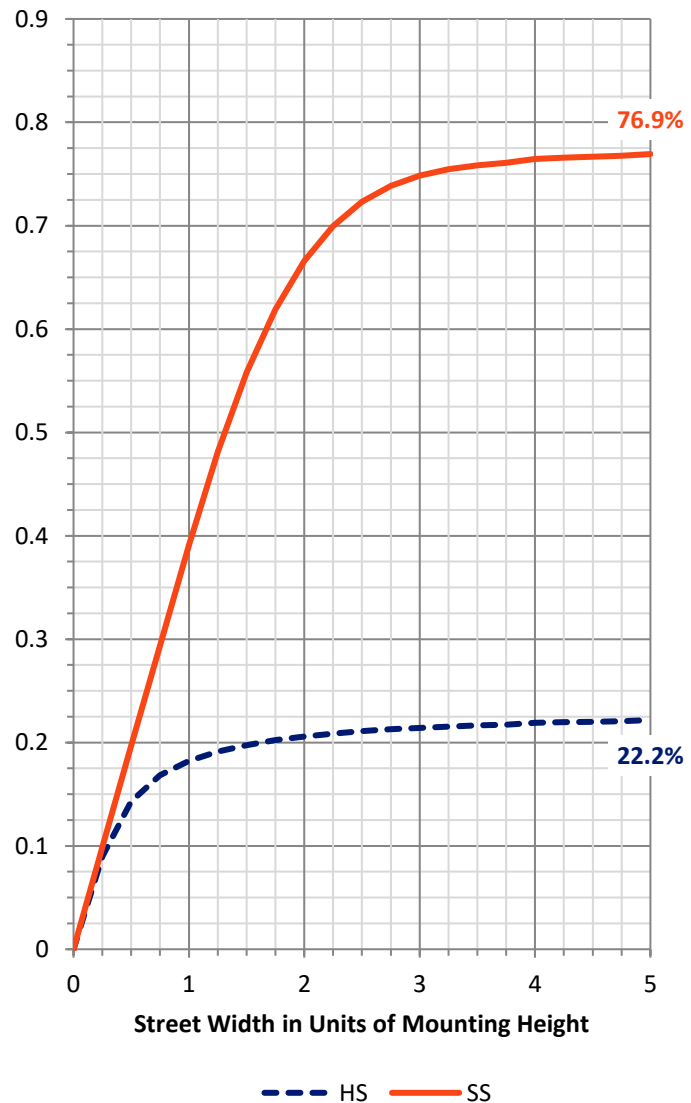
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2806.7	0.0	2806.7
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	9568.8	0.0	9568.8
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	12375.5	0.0	12375.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.9	1.1
10°-20°	434.2	3.5
20°-30°	754.3	6.1
30°-40°	1102.3	8.9
40°-50°	1730.0	14.0
50°-60°	2660.4	21.5
60°-70°	3250.4	26.3
70°-80°	2015.2	16.3
80°-90°	292.7	2.4
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°	12375.5	100.0
0°-180°	12375.5	100.0

**Coefficient of Utilization**



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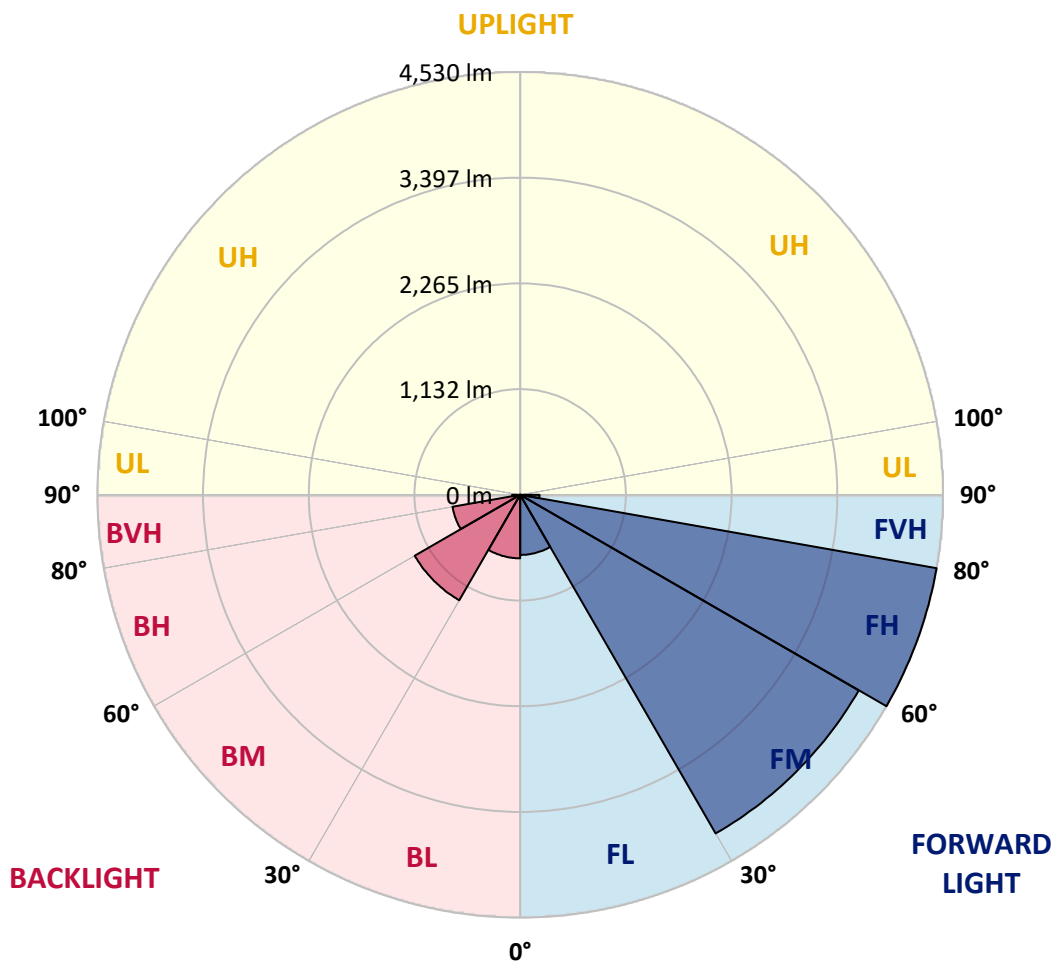
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	643.9	5.2			
FM	(30°-60°)	4188.5	33.8			
FH	(60°-80°)	4529.6	36.6			G2/5000
FVH	(80°-90°)	206.7	1.7			G2/225
BL	(0°-30°)	680.5	5.5	B2/1000		
BM	(30°-60°)	1304.2	10.5	B2/2500		
BH	(60°-80°)	736.0	5.9	B2/1000		G2/1000
BVH	(80°-90°)	86.0	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°	54°	55°	65°	75°	85°
0°	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6
2.5°	1330.2	1325.7	1325.7	1332.5	1334.7	1341.4	1341.4	1343.8	1350.6	1361.9	1375.6
5°	1289.3	1287.1	1289.3	1298.5	1303.0	1316.6	1321.0	1323.5	1336.9	1355.2	1375.6
7.5°	1248.6	1246.4	1250.9	1264.5	1278.1	1298.5	1309.8	1312.1	1332.5	1357.3	1384.6
10°	1235.0	1232.7	1239.5	1250.9	1264.5	1287.1	1305.2	1307.6	1336.9	1366.4	1404.9
12.5°	1253.1	1250.9	1257.6	1268.9	1282.6	1298.5	1318.8	1321.0	1359.7	1398.1	1438.9
15°	1298.5	1298.5	1300.7	1307.6	1321.0	1334.7	1352.8	1355.2	1395.8	1441.2	1482.1
17.5°	1368.7	1364.2	1364.2	1361.9	1371.0	1377.8	1400.5	1402.8	1445.7	1486.5	1527.3
20°	1454.8	1452.6	1443.4	1432.2	1429.9	1434.5	1457.1	1459.3	1502.4	1536.5	1574.9
22.5°	1559.1	1561.3	1541.0	1516.0	1504.8	1511.5	1531.9	1534.1	1565.8	1595.3	1629.3
25°	1697.3	1690.5	1661.1	1624.8	1602.0	1602.0	1622.5	1622.5	1652.0	1670.0	1692.8
27.5°	1828.7	1815.1	1787.9	1735.9	1699.6	1706.3	1726.7	1726.7	1753.9	1760.8	1772.0
30°	1971.5	1957.9	1923.9	1858.1	1810.7	1806.0	1830.9	1828.7	1865.1	1862.7	1853.7
32.5°	2146.1	2139.1	2082.5	1998.6	1935.2	1919.4	1942.0	1944.3	1967.0	1960.1	1930.6
35°	2390.7	2388.5	2336.3	2189.0	2105.2	2075.8	2089.3	2089.3	2105.2	2087.0	2037.1
37.5°	2698.9	2703.4	2658.2	2440.5	2322.7	2272.9	2275.1	2272.9	2277.5	2257.0	2204.9
40°	3007.0	3018.5	3016.1	2753.2	2603.6	2517.6	2485.9	2481.4	2492.6	2483.6	2433.8
42.5°	3412.8	3439.9	3376.5	3138.5	2970.9	2825.8	2739.7	2728.3	2753.2	2764.7	2717.1
45°	3834.1	3825.2	3725.5	3553.2	3401.3	3215.6	3052.4	3034.2	3052.4	3086.3	3036.5
47.5°	4054.1	4047.3	4022.3	3936.2	3913.5	3700.5	3453.5	3437.6	3403.7	3451.2	3392.3
50°	4416.5	4423.3	4321.3	4312.4	4407.5	4289.6	3906.6	3870.4	3809.3	3847.8	3797.9
52.5°	4679.5	4649.9	4586.6	4665.8	4962.6	4899.3	4332.7	4316.9	4260.2	4251.1	4228.5
55°	4785.9	4785.9	4797.3	4980.8	5404.6	5320.8	4795.1	4810.9	4733.8	4670.4	4699.8
57.5°	4817.7	4831.3	4928.7	5232.4	5923.6	5649.4	5304.9	5327.5	5216.5	5089.5	5182.5
60°	4661.3	4702.1	4935.5	5375.1	6215.8	5998.3	5841.9	5848.8	5687.9	5501.9	5665.3
62.5°	4260.2	4310.1	4727.1	5434.0	6168.2	6356.3	6349.5	6365.4	6145.6	5914.4	6118.4
65°	3768.5	3818.3	4262.5	5268.6	6132.0	6612.5	6814.1	6857.1	6573.8	6263.4	6401.6
67.5°	3045.7	3111.3	3532.9	4711.2	5955.3	6823.2	7249.1	7294.4	6904.7	6444.7	6376.7
70°	2207.1	2238.8	2592.4	3580.4	5234.7	6707.6	7593.6	7591.3	7013.4	6431.1	6036.8
72.5°	1062.8	1087.7	1393.6	2223.0	3743.5	5692.4	7344.4	7387.4	6863.9	6234.0	5259.5
75°	437.4	462.3	564.2	938.2	1964.8	3761.7	6224.9	6326.9	6234.0	5595.0	4115.1
77.5°	271.9	281.0	330.8	484.9	897.3	1756.1	4357.7	4495.8	4940.0	4482.4	2717.1
80°	203.9	210.7	247.0	339.9	566.6	648.0	2164.0	2338.6	2993.5	2571.9	1230.5
82.5°	170.0	172.2	197.2	247.0	385.3	371.5	693.4	772.7	1395.8	981.2	423.8
85°	158.6	163.1	176.7	176.7	244.8	233.4	287.7	301.4	405.7	335.3	147.3
87.5°	81.6	77.1	156.3	138.2	126.9	113.2	122.3	131.4	151.9	160.8	65.8
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°	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6	1384.6
2.5°	1380.1	1386.9	1398.1	1409.5	1423.0	1438.9	1448.0	1459.3	1468.4	1463.9	1461.6
5°	1386.9	1398.1	1423.0	1445.7	1473.0	1504.8	1525.1	1547.7	1565.8	1570.3	1563.6
7.5°	1398.1	1418.6	1452.6	1493.3	1529.6	1570.3	1602.0	1633.8	1656.6	1661.1	1661.1
10°	1425.4	1448.0	1493.3	1547.7	1590.8	1633.8	1670.0	1695.0	1715.5	1724.4	1724.4
12.5°	1463.9	1491.0	1545.4	1611.2	1658.8	1699.6	1720.0	1731.3	1740.3	1749.4	1751.7
15°	1509.2	1538.6	1604.4	1674.6	1724.4	1744.9	1744.9	1742.6	1742.6	1747.2	1751.7
17.5°	1554.5	1586.2	1654.1	1729.0	1760.8	1749.4	1733.5	1726.7	1722.2	1720.0	1726.7
20°	1602.0	1633.8	1701.7	1772.0	1763.1	1715.5	1692.8	1676.9	1663.3	1656.6	1665.5
22.5°	1654.1	1683.8	1753.9	1801.6	1733.5	1661.1	1617.9	1593.1	1570.3	1556.9	1565.8
25°	1715.5	1744.9	1812.9	1810.7	1681.4	1579.5	1511.5	1470.6	1445.7	1432.2	1432.2
27.5°	1787.9	1812.9	1878.5	1787.9	1609.0	1470.6	1371.0	1332.5	1325.7	1314.3	1314.3
30°	1862.7	1883.0	1939.8	1735.9	1509.2	1328.0	1219.1	1201.0	1203.3	1192.0	1194.2
32.5°	1939.8	1960.1	1976.0	1658.8	1380.1	1167.0	1094.6	1080.9	1078.7	1069.6	1060.4
35°	2048.6	2078.0	1980.6	1554.5	1223.8	1033.3	981.2	967.7	954.0	922.3	922.3
37.5°	2214.0	2245.7	1969.3	1425.4	1062.8	929.0	881.4	863.5	840.8	809.1	797.7
40°	2440.5	2440.5	1944.3	1280.4	933.6	845.2	799.9	777.3	752.3	720.6	713.9
42.5°	2707.9	2644.5	1905.8	1133.0	838.5	788.6	747.7	722.9	693.4	657.2	652.6
45°	3020.7	2848.4	1851.3	1001.6	768.2	754.5	729.7	686.7	636.8	598.2	591.4
47.5°	3324.3	3032.0	1799.2	908.6	709.3	741.0	720.6	648.0	580.1	525.7	519.0
50°	3657.4	3195.1	1738.1	831.7	663.9	731.9	709.3	591.4	516.6	478.2	473.5
52.5°	3990.5	3360.6	1672.4	750.1	625.4	713.9	682.2	550.7	514.4	462.3	455.5
55°	4341.8	3553.2	1595.3	659.4	580.1	677.5	645.8	548.3	530.3	462.3	446.4
57.5°	4683.9	3766.2	1470.6	571.1	530.3	623.2	632.2	534.9	496.3	457.7	439.6
60°	5062.4	3992.8	1264.5	496.3	487.2	577.9	614.1	505.3	457.7	444.1	435.0
62.5°	5366.0	4196.7	988.0	444.1	450.9	541.6	591.4	487.2	441.8	430.6	428.3
65°	5497.4	4201.4	709.3	398.8	414.7	507.6	568.7	471.3	428.3	423.8	421.5
67.5°	5359.3	3970.1	498.5	355.8	376.2	475.9	539.3	455.5	414.7	417.0	412.4
70°	4912.8	3483.0	364.8	314.9	339.9	441.8	507.6	435.0	398.8	403.3	396.5
72.5°	4110.6	2714.8	292.3	281.0	310.5	405.7	475.9	412.4	374.0	376.2	362.6
75°	3036.5	1799.2	244.8	251.5	276.5	371.5	435.0	382.9	346.7	337.7	328.6
77.5°	1806.0	924.5	201.7	219.8	247.0	330.8	389.8	346.7	317.2	301.4	294.6
80°	745.6	374.0	165.4	185.8	215.2	294.6	344.4	303.6	283.2	267.3	258.4
82.5°	296.9	183.6	131.4	151.9	181.3	256.0	301.4	267.3	247.0	235.6	210.7
85°	113.2	90.6	88.4	106.4	136.0	197.2	249.3	224.3	208.4	179.0	172.2
87.5°	45.4	40.9	40.9	52.1	77.1	124.7	179.0	156.3	163.1	129.1	131.4
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)