

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: P799815

Luminaire Tested: **ARCH2-50-750-U-T3**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P799815  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-50-750-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

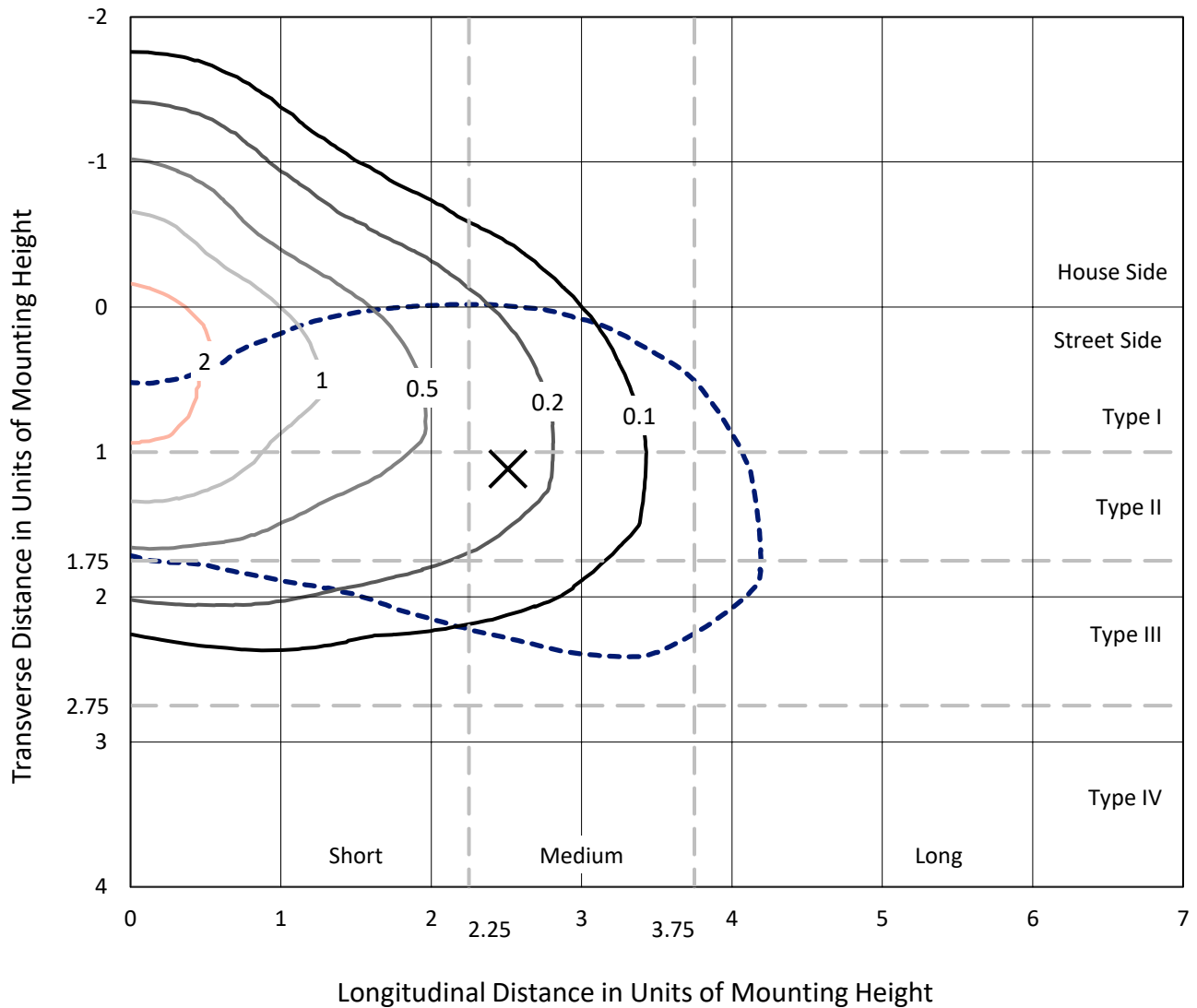
Lumens per Lamp: N/A  
Luminaire Lumens: 8089 lumens  
Efficiency: N/A  
Efficacy: 149.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 54  
Input Voltage (V): NR  
Input Current (Ain): 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

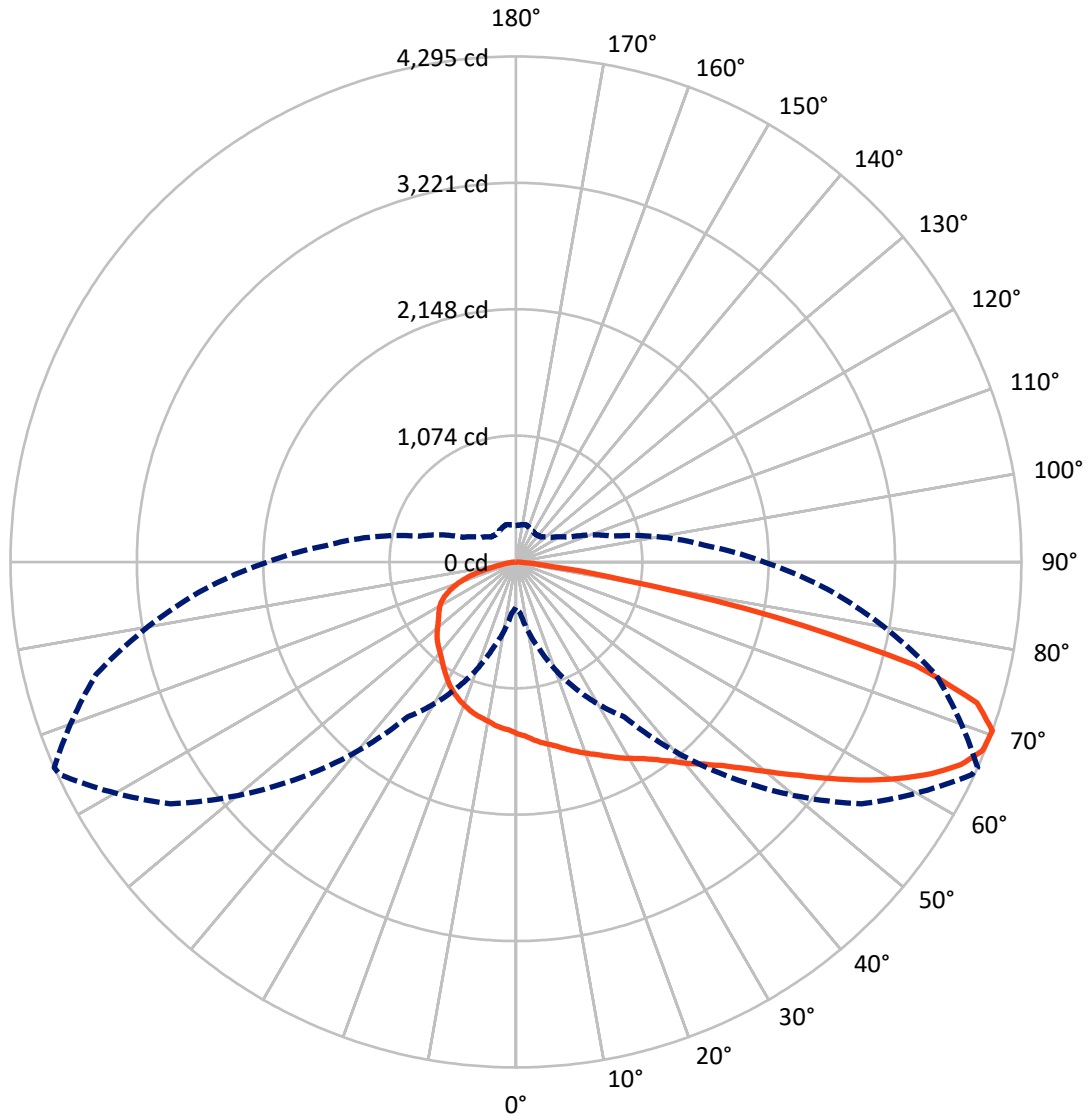
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2143.4	0.0	2143.4
	% Fixture	26.5	0.0	26.5
<b>Street Side</b>	Lumens	5945.6	0.0	5945.6
	% Fixture	73.5	0.0	73.5
<b>Total</b>	Lumens	8089.0	0.0	8089.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.3	1.7
10°-20°	420.8	5.2
20°-30°	705.4	8.7
30°-40°	1056.2	13.1
40°-50°	1412.1	17.5
50°-60°	1648.7	20.4
60°-70°	1639.4	20.3
70°-80°	970.5	12.0
80°-90°	95.7	1.2
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°	8089.0	100.0
0°-180°	8089.0	100.0



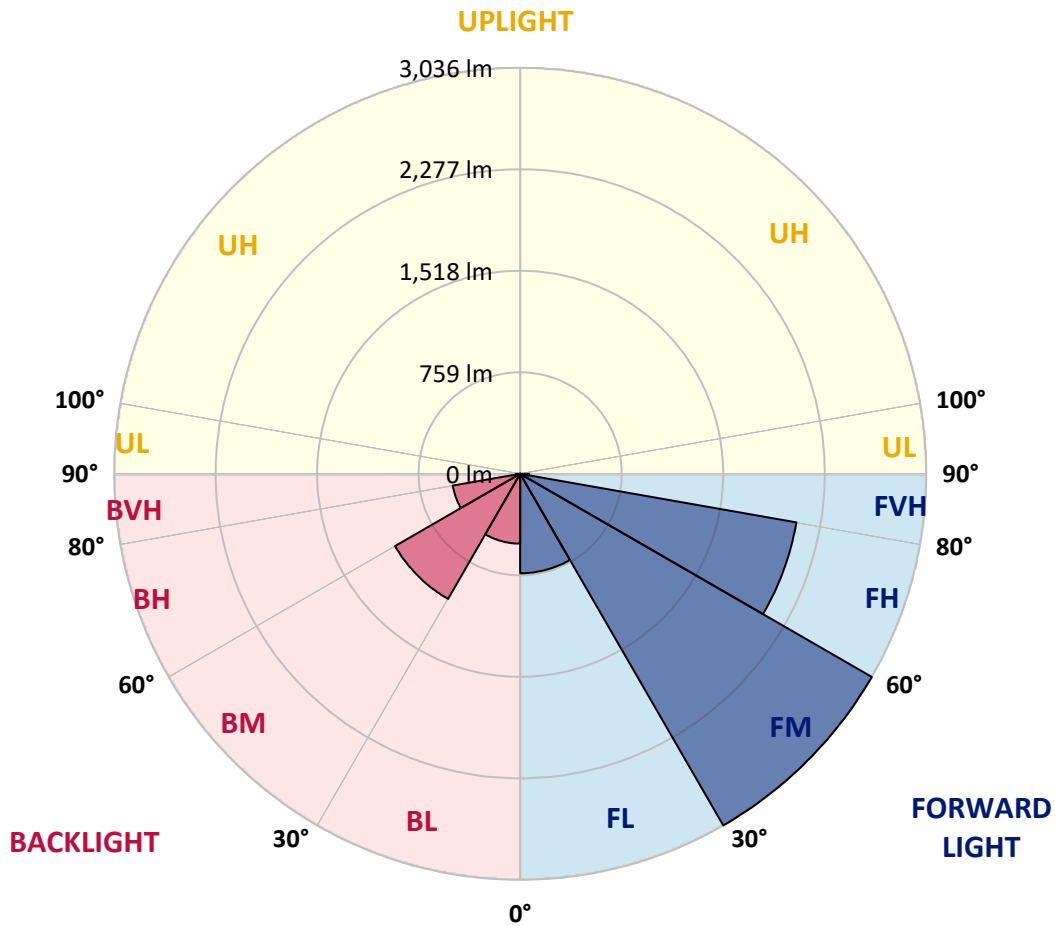
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 CATALOG NUMBER: ARCH2-50-750-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	744.0	9.2			
FM (30°-60°)	3036.5	37.5			
FH (60°-80°)	2097.9	25.9			G2/5000
FVH (80°-90°)	67.2	0.8			G1/100
BL (0°-30°)	522.5	6.5	B2/1000		
BM (30°-60°)	1080.5	13.4	B2/2500		
BH (60°-80°)	512.0	6.3	B2/1000		G2/1000
BVH (80°-90°)	28.4	0.4			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 Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9
2.5°	1513.6	1511.2	1510.0	1505.2	1494.5	1499.2	1488.5	1481.3	1480.2	1463.5	1453.9
5°	1575.6	1574.4	1572.0	1564.8	1548.1	1550.5	1532.6	1519.5	1515.9	1489.7	1469.4
7.5°	1628.1	1625.7	1624.5	1614.9	1597.0	1595.8	1574.4	1555.3	1549.3	1513.6	1482.5
10°	1668.6	1665.0	1667.4	1657.9	1638.8	1635.2	1607.8	1582.7	1576.8	1531.4	1488.5
12.5°	1703.2	1700.8	1704.4	1696.0	1680.5	1677.0	1649.5	1617.3	1610.2	1557.7	1501.6
15°	1741.4	1733.0	1740.2	1736.6	1725.9	1724.7	1699.6	1663.8	1654.3	1591.1	1521.9
17.5°	1761.6	1756.9	1765.2	1766.4	1761.6	1770.0	1746.1	1703.2	1694.8	1622.1	1539.8
20°	1775.9	1768.8	1778.3	1785.5	1789.1	1805.8	1786.7	1744.9	1735.4	1651.9	1556.5
22.5°	1824.9	1809.3	1810.5	1815.3	1817.7	1841.5	1829.6	1789.1	1779.5	1688.9	1576.8
25°	1947.7	1916.7	1896.4	1882.1	1865.4	1885.7	1878.5	1839.2	1830.8	1733.0	1601.8
27.5°	2138.5	2099.2	2058.6	2016.9	1951.3	1942.9	1931.0	1895.2	1885.7	1777.1	1626.9
30°	2355.6	2316.2	2268.5	2201.7	2078.9	2014.5	1987.1	1947.7	1937.0	1816.5	1650.7
32.5°	2571.5	2536.9	2489.2	2408.1	2232.8	2101.6	2043.1	2002.6	1991.8	1859.4	1679.3
35°	2739.7	2718.2	2687.2	2585.8	2385.4	2204.1	2124.2	2075.3	2063.4	1927.4	1731.8
37.5°	2875.6	2860.1	2833.9	2727.7	2496.3	2306.7	2217.3	2161.2	2148.1	2001.4	1787.9
40°	3076.0	3035.5	3014.0	2860.1	2593.0	2399.7	2322.2	2263.8	2249.5	2080.1	1833.2
42.5°	3246.6	3216.7	3190.5	2978.2	2684.8	2479.6	2421.2	2367.5	2348.5	2157.6	1882.1
45°	3275.2	3287.1	3274.0	3036.6	2830.3	2558.4	2521.4	2486.8	2468.9	2262.6	1956.0
47.5°	3276.4	3276.4	3198.9	3070.0	3010.4	2646.6	2628.7	2640.7	2621.6	2396.2	2044.3
50°	3190.5	3206.0	3165.5	3078.4	3058.1	2734.9	2759.9	2824.3	2805.3	2538.1	2139.7
52.5°	3012.8	3064.1	3062.9	3065.3	2988.9	2810.0	2898.3	3045.0	3012.8	2697.9	2241.1
55°	2699.1	2801.7	2893.5	2972.2	2929.3	2855.4	3067.7	3280.0	3246.6	2876.8	2343.7
57.5°	2430.7	2496.3	2610.8	2833.9	2858.9	2894.7	3226.3	3525.7	3495.8	3074.8	2451.0
60°	2124.2	2214.9	2329.4	2646.6	2773.1	2946.0	3400.4	3765.4	3736.8	3275.2	2554.8
62.5°	1653.1	1770.0	1999.0	2359.2	2647.8	2978.2	3537.6	3976.5	3963.4	3464.8	2647.8
65°	1152.2	1255.9	1576.8	2006.1	2448.6	2963.9	3647.3	4165.0	4153.0	3619.9	2713.4
67.5°	672.7	793.2	1155.7	1614.9	2096.8	2864.9	3683.1	4275.9	4275.9	3714.1	2731.3
70°	384.1	440.1	762.1	1177.2	1607.8	2591.8	3582.9	4274.7	4295.0	3692.6	2657.4
72.5°	268.4	293.4	512.9	792.0	1090.1	2096.8	3320.5	4068.3	4095.8	3489.9	2404.5
75°	208.7	226.6	361.4	540.3	687.0	1424.1	2746.8	3430.2	3503.0	2974.6	1944.1
77.5°	158.6	171.8	211.1	337.5	440.1	818.2	1812.9	2249.5	2254.2	1821.3	1042.4
80°	115.7	128.8	140.7	206.3	233.8	382.9	684.6	939.9	913.6	881.4	564.2
82.5°	69.2	82.3	85.9	112.1	114.5	163.4	239.7	302.9	291.0	387.6	264.8
85°	29.8	41.7	44.1	51.3	48.9	66.8	95.4	79.9	71.6	82.3	57.3
87.5°	7.2	11.9	11.9	13.1	10.7	16.7	17.9	13.1	11.9	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P799815  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9
2.5°	1451.5	1448.0	1449.1	1428.9	1422.9	1416.9	1413.4	1411.0	1408.6	1412.2	1415.7
5°	1462.3	1453.9	1444.4	1414.6	1402.6	1389.5	1380.0	1371.6	1368.0	1368.0	1371.6
7.5°	1470.6	1456.3	1436.0	1396.7	1375.2	1357.3	1341.8	1331.1	1325.1	1325.1	1328.7
10°	1471.8	1451.5	1419.3	1371.6	1343.0	1316.8	1298.9	1286.9	1278.6	1278.6	1281.0
12.5°	1479.0	1451.5	1409.8	1352.5	1316.8	1284.6	1263.1	1245.2	1241.6	1241.6	1244.0
15°	1490.9	1457.5	1403.8	1335.8	1292.9	1255.9	1232.1	1213.0	1205.8	1210.6	1211.8
17.5°	1501.6	1461.1	1393.1	1314.4	1263.1	1222.5	1196.3	1179.6	1170.1	1180.8	1180.8
20°	1508.8	1461.1	1377.6	1286.9	1230.9	1185.6	1160.5	1140.2	1133.1	1146.2	1147.4
22.5°	1519.5	1459.9	1360.9	1259.5	1196.3	1148.6	1123.5	1108.0	1104.5	1118.8	1123.5
25°	1531.4	1462.3	1343.0	1228.5	1158.1	1111.6	1092.5	1085.4	1087.8	1105.6	1111.6
27.5°	1544.6	1467.0	1325.1	1193.9	1116.4	1074.6	1063.9	1067.5	1077.0	1099.7	1106.8
30°	1556.5	1468.2	1300.1	1153.4	1068.7	1029.3	1034.1	1049.6	1063.9	1086.6	1094.9
32.5°	1572.0	1469.4	1273.8	1109.2	1017.4	988.8	1010.2	1035.3	1049.6	1071.1	1080.6
35°	1610.2	1489.7	1253.5	1066.3	969.7	954.2	990.0	1022.2	1030.5	1049.6	1057.9
37.5°	1654.3	1523.1	1242.8	1022.2	923.2	919.6	964.9	997.1	999.5	1011.4	1019.8
40°	1681.7	1537.4	1230.9	985.2	881.4	883.8	930.3	955.4	950.6	958.9	964.9
42.5°	1709.2	1542.2	1205.8	954.2	842.1	844.4	880.2	898.1	900.5	918.4	926.7
45°	1755.7	1555.3	1178.4	925.5	806.3	797.9	819.4	843.2	874.3	908.8	918.4
47.5°	1817.7	1582.7	1149.8	891.0	771.7	744.3	752.6	794.3	826.5	858.8	864.7
50°	1880.9	1610.2	1123.5	849.2	737.1	687.0	690.6	728.7	755.0	780.0	783.6
52.5°	1942.9	1634.0	1100.9	809.9	697.7	619.0	633.3	672.7	690.6	702.5	706.1
55°	2004.9	1654.3	1080.6	776.5	652.4	565.3	578.5	615.4	633.3	639.3	641.7
57.5°	2069.4	1678.1	1065.1	747.8	601.1	517.6	526.0	552.2	568.9	576.1	573.7
60°	2123.0	1698.4	1056.7	718.0	549.8	473.5	471.1	495.0	518.8	526.0	523.6
62.5°	2164.8	1711.5	1043.6	679.8	504.5	429.4	417.4	448.5	473.5	478.3	481.9
65°	2187.4	1712.7	1011.4	630.9	458.0	381.7	373.3	404.3	419.8	424.6	424.6
67.5°	2183.9	1693.7	948.2	565.3	415.1	338.7	331.6	350.7	373.3	376.9	373.3
70°	2109.9	1614.9	846.8	496.2	363.8	300.6	287.4	306.5	328.0	314.9	308.9
72.5°	1900.0	1411.0	697.7	419.8	306.5	252.9	246.9	266.0	267.2	269.6	263.6
75°	1499.2	1050.8	522.4	326.8	248.1	212.3	211.1	207.5	212.3	221.8	214.7
77.5°	787.2	524.8	282.7	200.4	180.1	170.6	162.2	161.0	175.3	181.3	174.1
80°	427.0	294.6	162.2	120.5	109.7	110.9	121.7	119.3	134.8	138.4	132.4
82.5°	186.1	139.5	79.9	72.8	72.8	71.6	75.1	83.5	100.2	100.2	79.9
85°	40.6	34.6	31.0	35.8	40.6	40.6	40.6	40.6	28.6	15.5	10.7
87.5°	13.1	13.1	13.1	14.3	15.5	15.5	13.1	9.5	6.0	1.2	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)