

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: P798855

Luminaire Tested: **ARCH1-40-727-U-T3**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798855
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: ARCH1-40-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5357 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

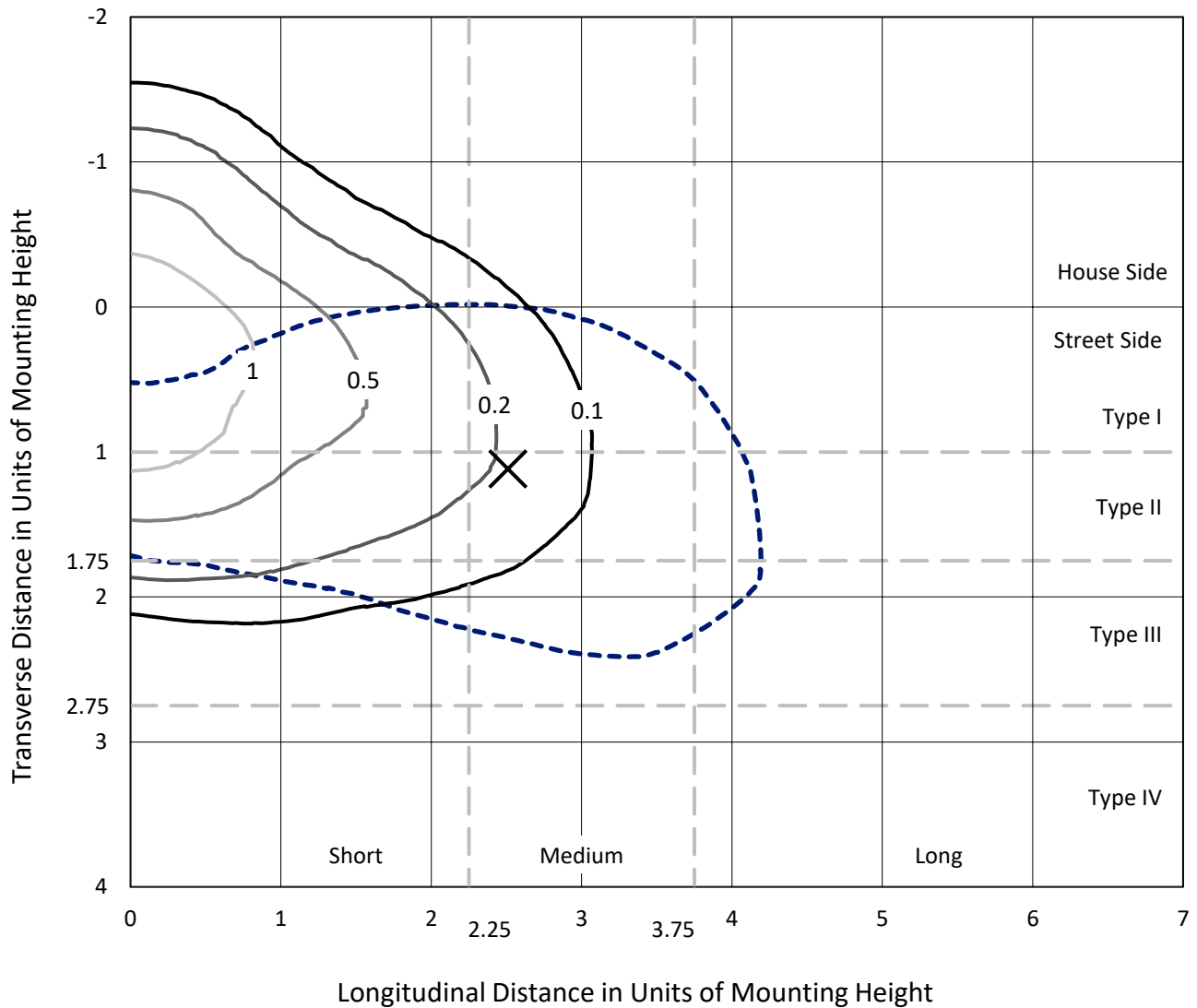
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

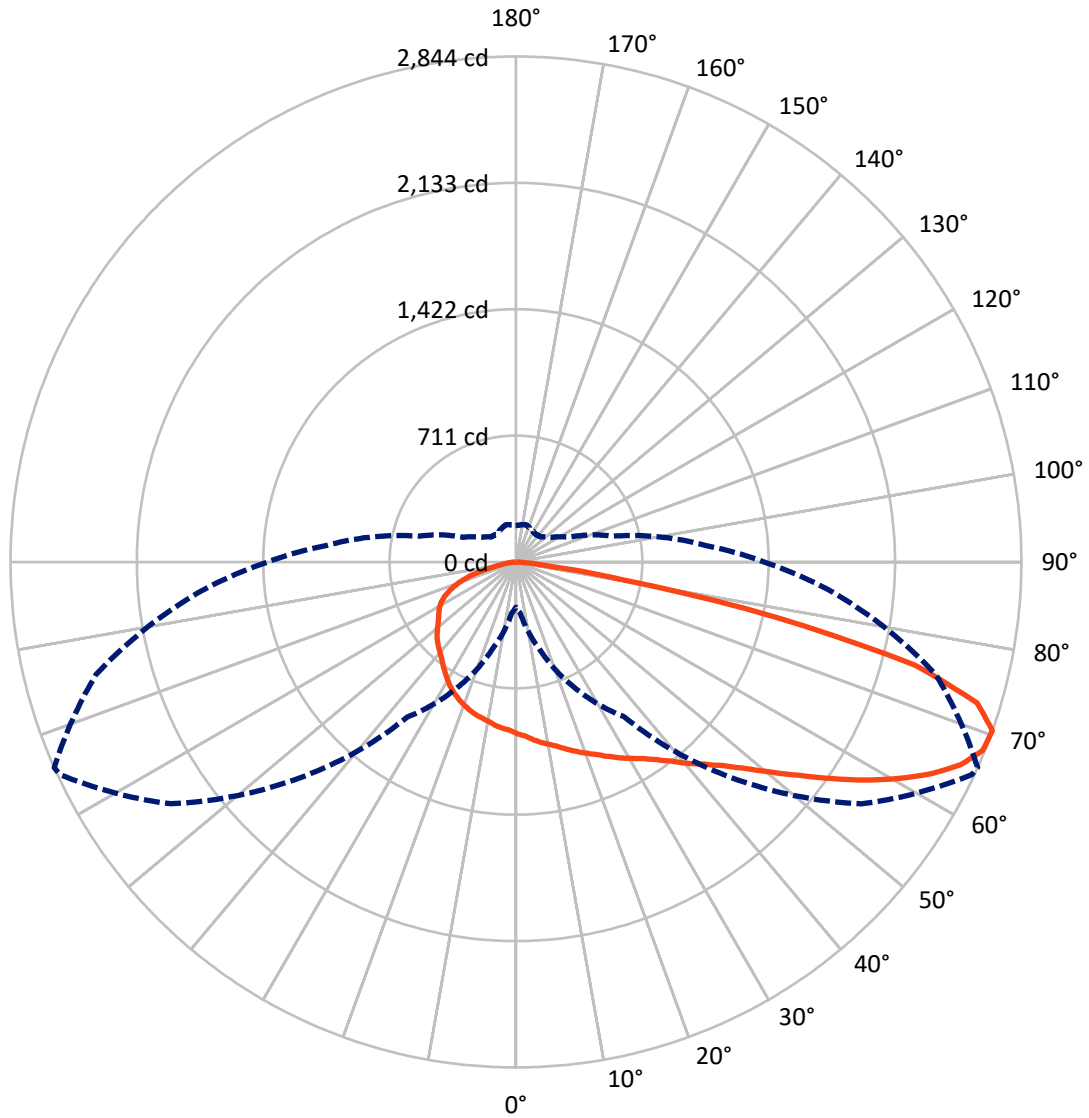
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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
House Side	Lumens	1419.5	0.0	1419.5
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	3937.5	0.0	3937.5
	% Fixture	73.5	0.0	73.5
Total	Lumens	5357.0	0.0	5357.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	1.7
10°-20°	278.7	5.2
20°-30°	467.1	8.7
30°-40°	699.5	13.1
40°-50°	935.2	17.5
50°-60°	1091.9	20.4
60°-70°	1085.7	20.3
70°-80°	642.7	12.0
80°-90°	63.4	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°	5357.0	100.0
0°-180°	5357.0	100.0



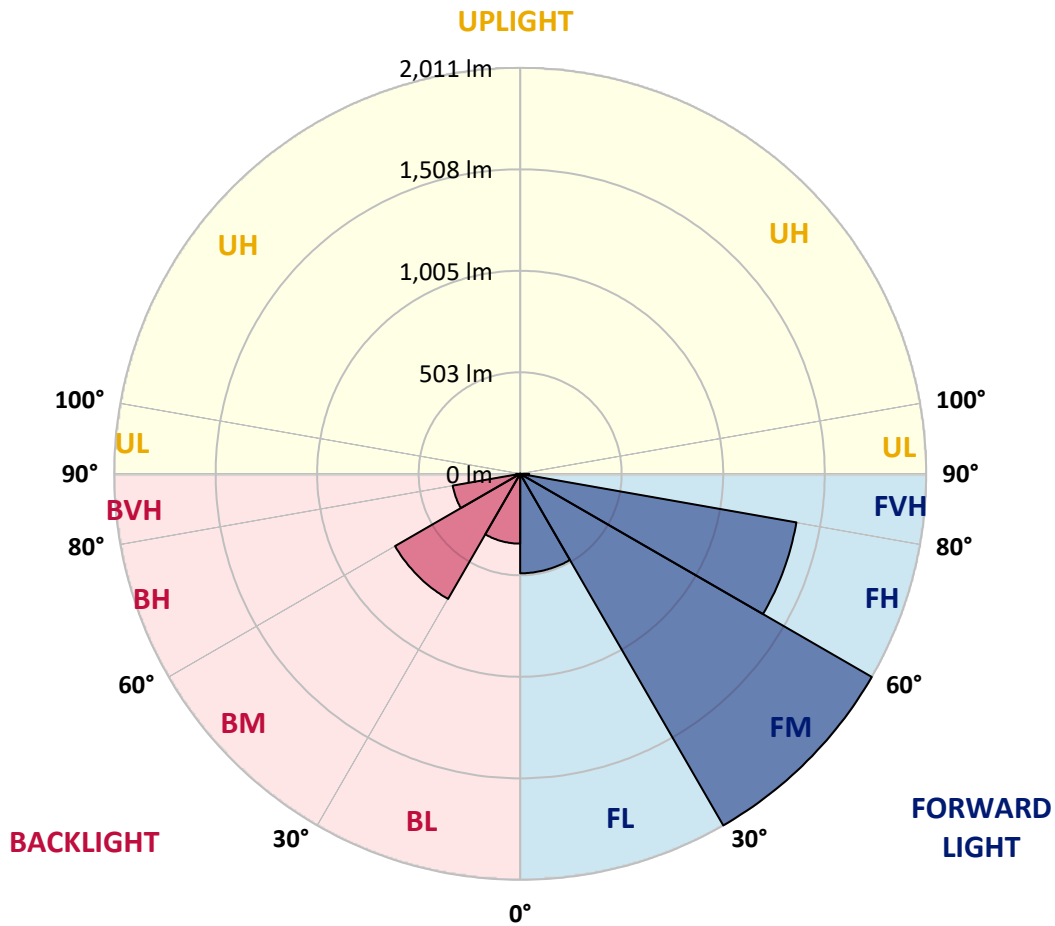
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	492.7	9.2			
FM (30°-60°)	2010.9	37.5			
FH (60°-80°)	1389.3	25.9			G1/1800
FVH (80°-90°)	44.5	0.8			G1/100
BL (0°-30°)	346.0	6.5	B1/500		
BM (30°-60°)	715.6	13.4	B1/1000		
BH (60°-80°)	339.1	6.3	B1/500		G1/500
BVH (80°-90°)	18.8	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8
2.5°	1002.4	1000.8	1000.0	996.8	989.7	992.9	985.8	981.0	980.2	969.2	962.9
5°	1043.4	1042.6	1041.1	1036.3	1025.3	1026.8	1015.0	1006.3	1003.9	986.6	973.1
7.5°	1078.2	1076.6	1075.8	1069.5	1057.7	1056.9	1042.6	1030.0	1026.1	1002.4	981.8
10°	1105.0	1102.7	1104.3	1097.9	1085.3	1082.9	1064.8	1048.2	1044.2	1014.2	985.8
12.5°	1128.0	1126.4	1128.7	1123.2	1112.9	1110.6	1092.4	1071.1	1066.3	1031.6	994.5
15°	1153.2	1147.7	1152.4	1150.1	1143.0	1142.2	1125.6	1101.9	1095.6	1053.7	1007.9
17.5°	1166.7	1163.5	1169.0	1169.8	1166.7	1172.2	1156.4	1128.0	1122.4	1074.2	1019.7
20°	1176.1	1171.4	1177.7	1182.5	1184.8	1195.9	1183.2	1155.6	1149.3	1094.0	1030.8
22.5°	1208.5	1198.3	1199.0	1202.2	1203.8	1219.6	1211.7	1184.8	1178.5	1118.5	1044.2
25°	1289.9	1269.3	1255.9	1246.4	1235.4	1248.8	1244.1	1218.0	1212.5	1147.7	1060.8
27.5°	1416.3	1390.2	1363.3	1335.7	1292.2	1286.7	1278.8	1255.1	1248.8	1176.9	1077.4
30°	1560.0	1534.0	1502.4	1458.1	1376.8	1334.1	1315.9	1289.9	1282.8	1203.0	1093.2
32.5°	1703.0	1680.1	1648.5	1594.8	1478.7	1391.8	1353.1	1326.2	1319.1	1231.4	1112.2
35°	1814.4	1800.1	1779.6	1712.5	1579.8	1459.7	1406.8	1374.4	1366.5	1276.5	1146.9
37.5°	1904.4	1894.1	1876.8	1806.5	1653.2	1527.6	1468.4	1431.3	1422.6	1325.4	1184.0
40°	2037.1	2010.3	1996.0	1894.1	1717.2	1589.2	1537.9	1499.2	1489.7	1377.6	1214.0
42.5°	2150.1	2130.3	2112.9	1972.3	1778.0	1642.2	1603.5	1567.9	1555.3	1428.9	1246.4
45°	2169.0	2176.9	2168.2	2011.0	1874.4	1694.3	1669.8	1646.9	1635.1	1498.4	1295.4
47.5°	2169.8	2169.8	2118.5	2033.2	1993.7	1752.7	1740.9	1748.8	1736.2	1586.9	1353.9
50°	2112.9	2123.2	2096.3	2038.7	2025.3	1811.2	1827.8	1870.4	1857.8	1680.9	1417.0
52.5°	1995.2	2029.2	2028.4	2030.0	1979.4	1861.0	1919.4	2016.6	1995.2	1786.7	1484.2
55°	1787.5	1855.4	1916.3	1968.4	1940.0	1891.0	2031.6	2172.2	2150.1	1905.2	1552.1
57.5°	1609.8	1653.2	1729.1	1876.8	1893.3	1917.0	2136.6	2334.9	2315.1	2036.3	1623.2
60°	1406.8	1466.8	1542.6	1752.7	1836.5	1951.0	2252.0	2493.7	2474.7	2169.0	1691.9
62.5°	1094.8	1172.2	1323.8	1562.4	1753.5	1972.3	2342.8	2633.5	2624.8	2294.6	1753.5
65°	763.0	831.7	1044.2	1328.6	1621.6	1962.9	2415.5	2758.3	2750.4	2397.3	1797.0
67.5°	445.5	525.3	765.4	1069.5	1388.6	1897.3	2439.2	2831.7	2831.7	2459.7	1808.8
70°	254.3	291.5	504.7	779.6	1064.8	1716.4	2372.8	2830.9	2844.4	2445.5	1759.9
72.5°	177.7	194.3	339.6	524.5	722.0	1388.6	2199.0	2694.3	2712.5	2311.2	1592.4
75°	138.2	150.1	239.3	357.8	455.0	943.1	1819.1	2271.7	2319.9	1970.0	1287.5
77.5°	105.1	113.7	139.8	223.5	291.5	541.9	1200.6	1489.7	1492.9	1206.2	690.4
80°	76.6	85.3	93.2	136.6	154.8	253.6	453.4	622.4	605.1	583.7	373.6
82.5°	45.8	54.5	56.9	74.2	75.8	108.2	158.8	200.6	192.7	256.7	175.4
85°	19.7	27.6	29.2	34.0	32.4	44.2	63.2	52.9	47.4	54.5	37.9
87.5°	4.7	7.9	7.9	8.7	7.1	11.1	11.8	8.7	7.9	9.5	9.5
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°	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8
2.5°	961.3	958.9	959.7	946.3	942.3	938.4	936.0	934.4	932.9	935.2	937.6
5°	968.4	962.9	956.5	936.8	928.9	920.2	913.9	908.4	906.0	906.0	908.4
7.5°	973.9	964.4	951.0	925.0	910.7	898.9	888.6	881.5	877.6	877.6	879.9
10°	974.7	961.3	940.0	908.4	889.4	872.0	860.2	852.3	846.8	846.8	848.3
12.5°	979.5	961.3	933.6	895.7	872.0	850.7	836.5	824.6	822.3	822.3	823.8
15°	987.4	965.2	929.7	884.7	856.2	831.7	815.9	803.3	798.6	801.7	802.5
17.5°	994.5	967.6	922.6	870.5	836.5	809.6	792.3	781.2	774.9	782.0	782.0
20°	999.2	967.6	912.3	852.3	815.2	785.1	768.6	755.1	750.4	759.1	759.9
22.5°	1006.3	966.8	901.3	834.1	792.3	760.7	744.1	733.8	731.4	740.9	744.1
25°	1014.2	968.4	889.4	813.6	767.0	736.2	723.5	718.8	720.4	732.2	736.2
27.5°	1022.9	971.6	877.6	790.7	739.3	711.7	704.6	706.9	713.3	728.3	733.0
30°	1030.8	972.3	861.0	763.8	707.7	681.7	684.8	695.1	704.6	719.6	725.1
32.5°	1041.1	973.1	843.6	734.6	673.8	654.8	669.0	685.6	695.1	709.3	715.6
35°	1066.3	986.6	830.2	706.2	642.2	631.9	655.6	676.9	682.5	695.1	700.6
37.5°	1095.6	1008.7	823.1	676.9	611.4	609.0	639.0	660.3	661.9	669.8	675.3
40°	1113.7	1018.2	815.2	652.4	583.7	585.3	616.1	632.7	629.5	635.1	639.0
42.5°	1131.9	1021.3	798.6	631.9	557.7	559.2	582.9	594.8	596.4	608.2	613.7
45°	1162.7	1030.0	780.4	612.9	534.0	528.4	542.6	558.4	579.0	601.9	608.2
47.5°	1203.8	1048.2	761.4	590.0	511.1	492.9	498.4	526.1	547.4	568.7	572.7
50°	1245.6	1066.3	744.1	562.4	488.1	455.0	457.3	482.6	500.0	516.6	519.0
52.5°	1286.7	1082.1	729.1	536.3	462.1	409.9	419.4	445.5	457.3	465.2	467.6
55°	1327.8	1095.6	715.6	514.2	432.1	374.4	383.1	407.6	419.4	423.4	425.0
57.5°	1370.4	1111.4	705.4	495.3	398.1	342.8	348.3	365.7	376.8	381.5	379.9
60°	1406.0	1124.8	699.8	475.5	364.1	313.6	312.0	327.8	343.6	348.3	346.8
62.5°	1433.6	1133.5	691.1	450.2	334.1	284.4	276.5	297.0	313.6	316.7	319.1
65°	1448.6	1134.3	669.8	417.8	303.3	252.8	247.2	267.8	278.0	281.2	281.2
67.5°	1446.3	1121.6	628.0	374.4	274.9	224.3	219.6	232.2	247.2	249.6	247.2
70°	1397.3	1069.5	560.8	328.6	240.9	199.1	190.4	203.0	217.2	208.5	204.6
72.5°	1258.3	934.4	462.1	278.0	203.0	167.5	163.5	176.1	176.9	178.5	174.6
75°	992.9	695.9	346.0	216.4	164.3	140.6	139.8	137.4	140.6	146.9	142.2
77.5°	521.3	347.5	187.2	132.7	119.3	113.0	107.4	106.6	116.1	120.1	115.3
80°	282.8	195.1	107.4	79.8	72.7	73.5	80.6	79.0	89.3	91.6	87.7
82.5°	123.2	92.4	52.9	48.2	48.2	47.4	49.8	55.3	66.4	66.4	52.9
85°	26.9	22.9	20.5	23.7	26.9	26.9	26.9	26.9	19.0	10.3	7.1
87.5°	8.7	8.7	8.7	9.5	10.3	10.3	8.7	6.3	3.9	0.8	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)