

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: P397753

Luminaire Tested: **ARCH-S-PA1-40-727-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-727-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5131 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 40
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

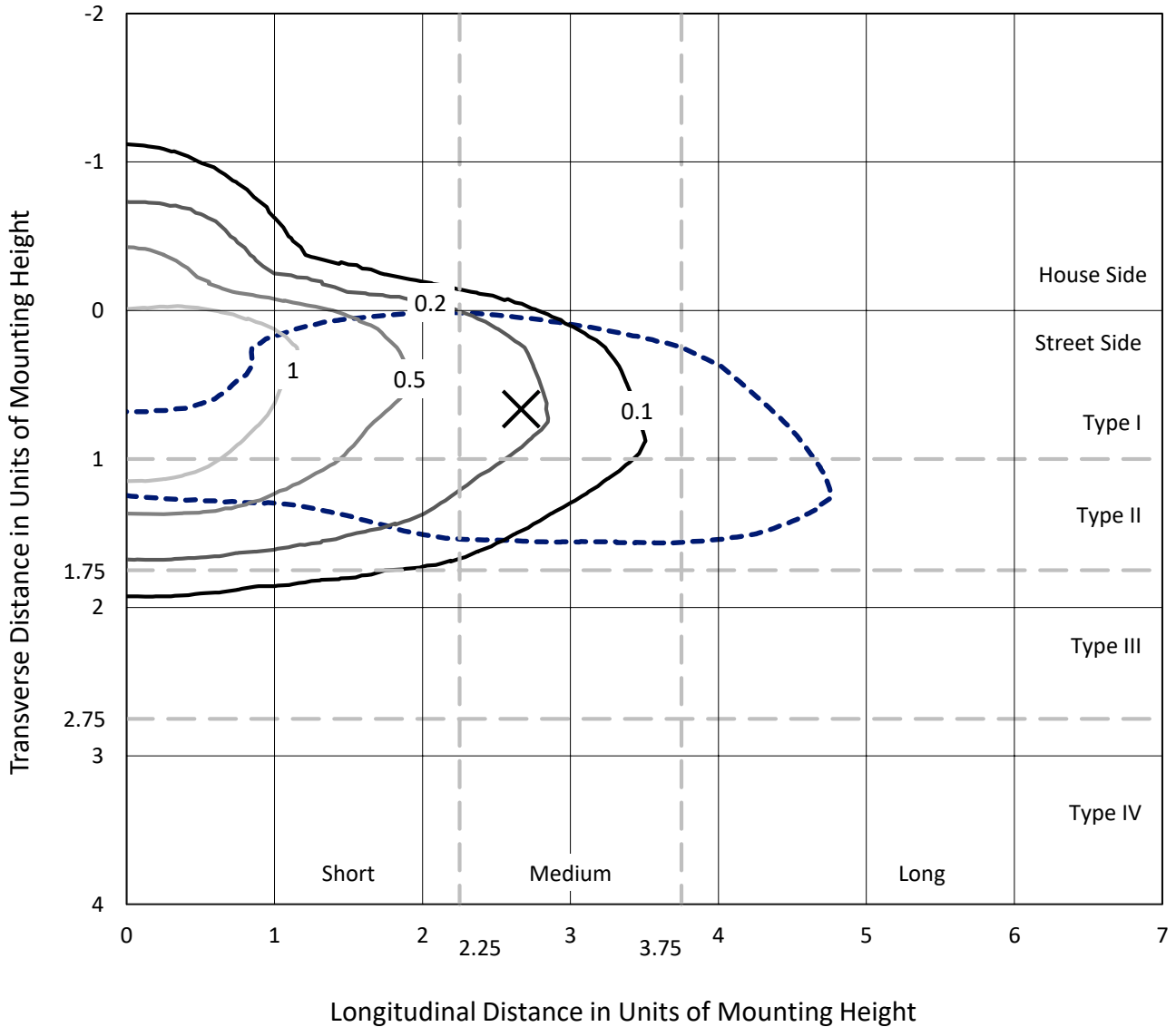


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

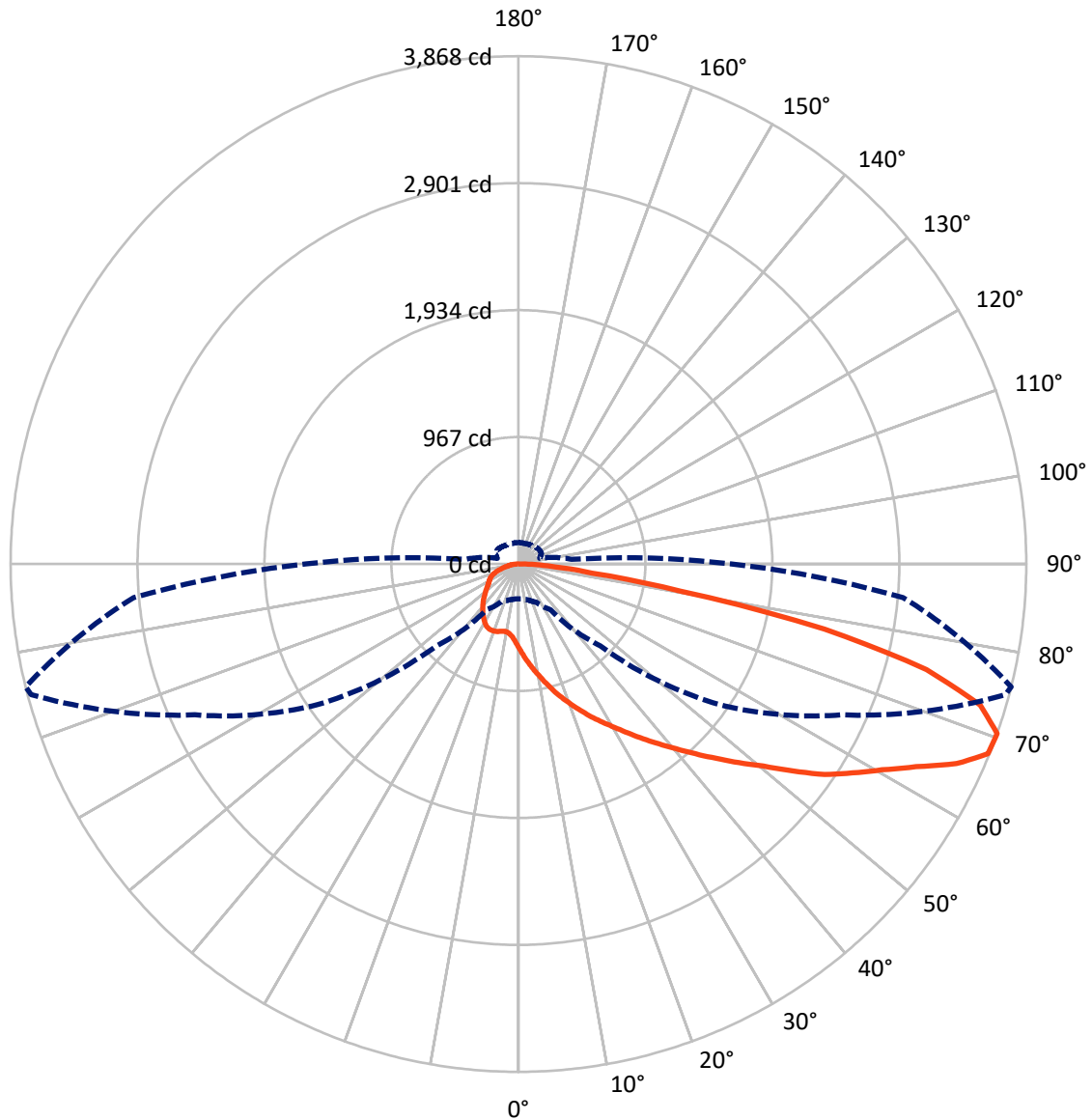


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	837.7	0.0	837.7
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	4293.3	0.0	4293.3
	% Fixture	83.7	0.0	83.7
Total	Lumens	5131.0	0.0	5131.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.3
10°-20°	226.6	4.4
20°-30°	405.4	7.9
30°-40°	655.8	12.8
40°-50°	948.7	18.5
50°-60°	1085.9	21.2
60°-70°	998.9	19.5
70°-80°	617.7	12.0
80°-90°	125.4	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°	5131.0	100.0
0°-180°	5131.0	100.0

Coefficient of Utilization



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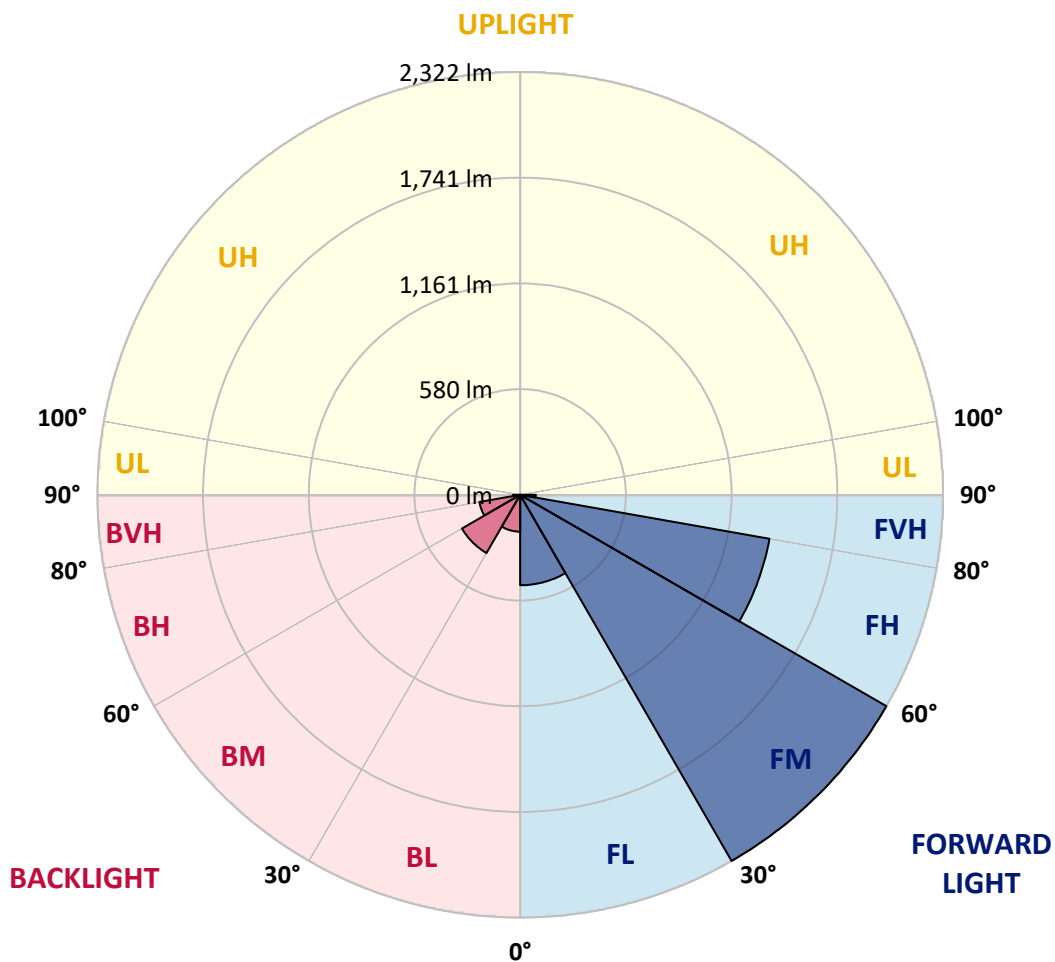
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	496.3	9.7			
FM (30°-60°)	2321.5	45.2			
FH (60°-80°)	1389.3	27.1			G1/1800
FVH (80°-90°)	86.1	1.7			G1/100
BL (0°-30°)	202.3	3.9	B1/500		
BM (30°-60°)	368.8	7.2	B1/1000		
BH (60°-80°)	227.2	4.4	B1/500		G1/500
BVH (80°-90°)	39.3	0.8			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7
2.5°	817.8	811.7	811.0	801.6	792.8	769.2	752.3	722.6	692.9	692.3	662.6
5°	945.3	939.2	935.8	924.4	909.5	878.5	848.1	802.2	751.6	748.3	692.3
7.5°	1031.6	1026.2	1019.5	1014.8	1000.6	972.9	935.8	881.2	811.7	804.9	726.7
10°	1089.7	1086.3	1084.9	1081.6	1072.8	1050.5	1014.8	956.7	871.7	864.3	763.1
12.5°	1114.6	1113.3	1119.4	1128.8	1132.2	1123.4	1089.0	1034.3	937.9	929.8	807.0
15°	1085.6	1087.0	1102.5	1134.9	1169.3	1188.2	1167.9	1114.6	1012.7	1001.3	858.2
17.5°	1072.1	1074.1	1084.9	1116.0	1164.6	1223.3	1232.7	1190.9	1084.9	1068.7	912.2
20°	1095.7	1098.4	1106.5	1130.8	1164.6	1227.3	1276.6	1263.7	1155.8	1138.9	964.2
22.5°	1155.8	1159.2	1158.5	1174.0	1196.9	1240.1	1300.8	1332.6	1230.0	1211.1	1018.1
25°	1284.0	1281.3	1258.3	1250.9	1257.0	1284.7	1333.2	1398.7	1307.6	1288.7	1074.8
27.5°	1458.1	1454.7	1412.9	1375.1	1341.3	1353.5	1379.1	1452.0	1386.5	1364.9	1128.8
30°	1644.3	1640.2	1591.7	1530.3	1455.4	1437.8	1434.4	1498.5	1466.2	1443.2	1186.1
32.5°	1825.8	1822.4	1770.5	1698.9	1595.7	1543.1	1510.7	1550.5	1556.6	1534.3	1248.9
35°	1991.1	1991.1	1946.6	1861.5	1744.8	1665.2	1611.9	1614.6	1660.5	1634.8	1320.4
37.5°	2138.2	2137.5	2088.9	2005.3	1893.2	1802.2	1736.0	1692.2	1759.7	1737.4	1395.3
40°	2254.9	2250.2	2214.4	2141.5	2028.9	1938.5	1871.7	1783.3	1870.3	1850.1	1474.9
42.5°	2339.9	2337.2	2312.9	2249.5	2142.2	2057.2	2011.3	1898.0	1995.8	1975.6	1568.0
45°	2373.0	2378.4	2378.4	2318.3	2233.3	2155.7	2135.5	2024.1	2131.4	2111.2	1667.9
47.5°	2319.7	2333.8	2362.9	2366.9	2292.0	2239.4	2246.1	2151.0	2271.1	2260.3	1777.2
50°	2153.0	2179.3	2242.8	2357.5	2315.6	2303.5	2340.6	2280.5	2420.9	2417.5	1910.1
52.5°	1723.2	1787.3	1985.0	2190.8	2299.4	2333.2	2434.4	2426.3	2613.8	2619.2	2083.5
55°	1321.8	1346.1	1574.8	1925.0	2200.2	2323.7	2497.1	2568.6	2823.0	2829.8	2242.8
57.5°	1068.7	1084.9	1209.8	1574.8	1974.2	2272.4	2546.4	2651.6	2983.6	3001.1	2384.4
60°	846.8	870.4	954.0	1205.0	1657.8	2149.0	2580.8	2744.1	3156.3	3182.6	2553.8
62.5°	629.5	641.0	719.9	892.6	1312.3	1927.0	2562.6	2844.6	3368.2	3399.9	2757.6
65°	448.0	458.1	514.1	634.9	970.2	1626.7	2456.6	2919.5	3634.0	3666.4	2962.7
67.5°	335.3	339.4	371.1	444.0	653.8	1263.7	2242.1	2906.7	3828.3	3857.3	3045.0
70°	265.2	266.5	282.0	321.2	425.1	879.8	1866.3	2718.4	3842.5	3868.1	2941.1
72.5°	220.0	219.3	228.1	246.9	296.2	556.6	1382.5	2368.9	3660.3	3677.9	2651.0
75°	181.5	182.8	188.9	199.7	226.0	367.0	896.0	1889.9	3229.2	3210.3	2224.5
77.5°	152.5	151.8	154.5	164.0	182.8	263.8	524.9	1365.6	2393.2	2383.8	1460.1
80°	122.8	124.1	128.2	136.3	153.8	201.1	310.4	852.2	1284.0	1249.6	697.7
82.5°	82.3	95.1	103.2	112.7	132.9	148.4	197.0	433.2	574.2	565.4	316.4
85°	39.1	52.0	76.9	87.7	108.0	93.1	133.6	206.5	287.4	284.1	114.0
87.5°	8.1	8.1	41.2	49.3	66.8	39.8	74.2	89.7	139.0	130.2	46.6
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°	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7
2.5°	645.0	626.8	590.4	561.4	531.7	514.8	493.9	483.8	481.7	476.3	480.4
5°	656.5	620.7	551.9	506.7	476.3	461.5	454.1	451.4	450.7	449.4	449.4
7.5°	672.0	617.4	527.6	481.7	462.2	457.5	459.5	463.5	464.2	465.6	464.9
10°	690.9	618.0	514.1	475.7	466.2	466.9	473.6	479.0	481.7	483.8	483.1
12.5°	717.2	626.1	512.1	479.7	475.7	478.4	485.1	490.5	493.2	493.9	493.9
15°	751.6	643.0	516.8	488.5	485.1	487.1	491.2	493.2	493.9	493.2	493.2
17.5°	789.4	663.2	523.6	493.9	488.5	486.5	485.1	483.1	479.0	476.3	476.3
20°	825.9	681.5	527.0	493.2	483.8	475.7	467.6	457.5	450.7	445.3	445.3
22.5°	862.3	698.3	527.0	485.8	471.0	455.4	438.6	422.4	412.3	405.5	405.5
25°	900.7	714.5	522.9	473.0	450.7	428.4	405.5	385.3	375.1	368.4	367.0
27.5°	933.1	724.0	512.1	454.8	425.7	397.4	371.1	350.2	342.8	336.7	336.7
30°	967.5	730.0	491.9	431.1	397.4	365.0	338.0	321.2	313.1	304.3	303.6
32.5°	1006.0	734.1	468.9	406.2	368.4	334.0	311.0	297.5	280.0	270.6	269.2
35°	1050.5	739.5	444.6	377.8	339.4	308.3	294.9	272.6	255.7	247.6	246.9
37.5°	1097.8	743.5	418.3	352.9	313.1	291.5	278.0	251.7	236.8	224.7	223.3
40°	1147.7	743.5	391.3	328.6	292.2	284.1	258.4	234.8	209.8	203.8	202.4
42.5°	1203.0	742.2	364.3	305.0	272.6	267.2	246.9	222.0	209.2	203.8	202.4
45°	1261.7	737.5	338.7	278.0	252.3	241.5	226.0	219.3	213.9	213.9	213.9
47.5°	1328.5	733.4	309.7	253.7	237.5	225.4	213.9	209.8	209.2	211.2	213.2
50°	1414.2	732.1	285.4	236.2	226.0	211.9	210.5	207.1	207.8	207.8	207.8
52.5°	1518.1	719.9	262.5	223.3	214.6	197.7	201.7	205.1	206.5	205.8	205.1
55°	1594.4	698.3	242.9	214.6	206.5	192.3	197.7	203.1	204.4	202.4	202.4
57.5°	1663.2	668.0	227.4	207.8	201.1	188.9	195.0	200.4	199.0	198.4	197.7
60°	1742.1	639.0	215.2	204.4	195.7	187.6	193.0	196.3	194.3	193.0	192.3
62.5°	1827.8	610.6	206.5	204.4	191.6	186.9	190.9	192.3	188.2	186.9	186.9
65°	1867.6	566.1	197.0	204.4	189.6	185.5	186.9	185.5	181.5	181.5	180.8
67.5°	1802.2	492.5	184.9	201.7	192.3	183.5	180.8	178.8	174.1	174.1	172.7
70°	1621.3	404.8	167.3	193.0	193.0	182.8	172.7	168.0	162.6	164.6	161.9
72.5°	1385.2	321.2	145.7	178.1	188.9	182.2	164.0	156.5	151.8	153.8	149.8
75°	1122.1	249.0	120.1	154.5	178.8	178.8	155.2	145.1	139.7	139.7	134.9
77.5°	715.2	184.2	97.8	128.2	160.6	174.1	147.8	132.2	124.1	122.1	118.7
80°	354.2	129.5	80.3	101.9	137.0	163.3	142.4	117.4	105.9	101.9	95.8
82.5°	188.2	89.7	64.1	79.6	109.3	147.1	135.6	101.2	87.0	81.0	74.2
85°	84.3	55.3	51.3	60.7	83.0	120.8	122.1	83.0	66.8	79.6	58.7
87.5°	31.0	25.0	25.0	31.0	47.9	50.6	86.4	53.3	42.5	29.0	22.9
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)