

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: P397881

Luminaire Tested: **ARCH-S-PA1-50-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397881  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-50-830-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6265 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
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: 28.75 FT

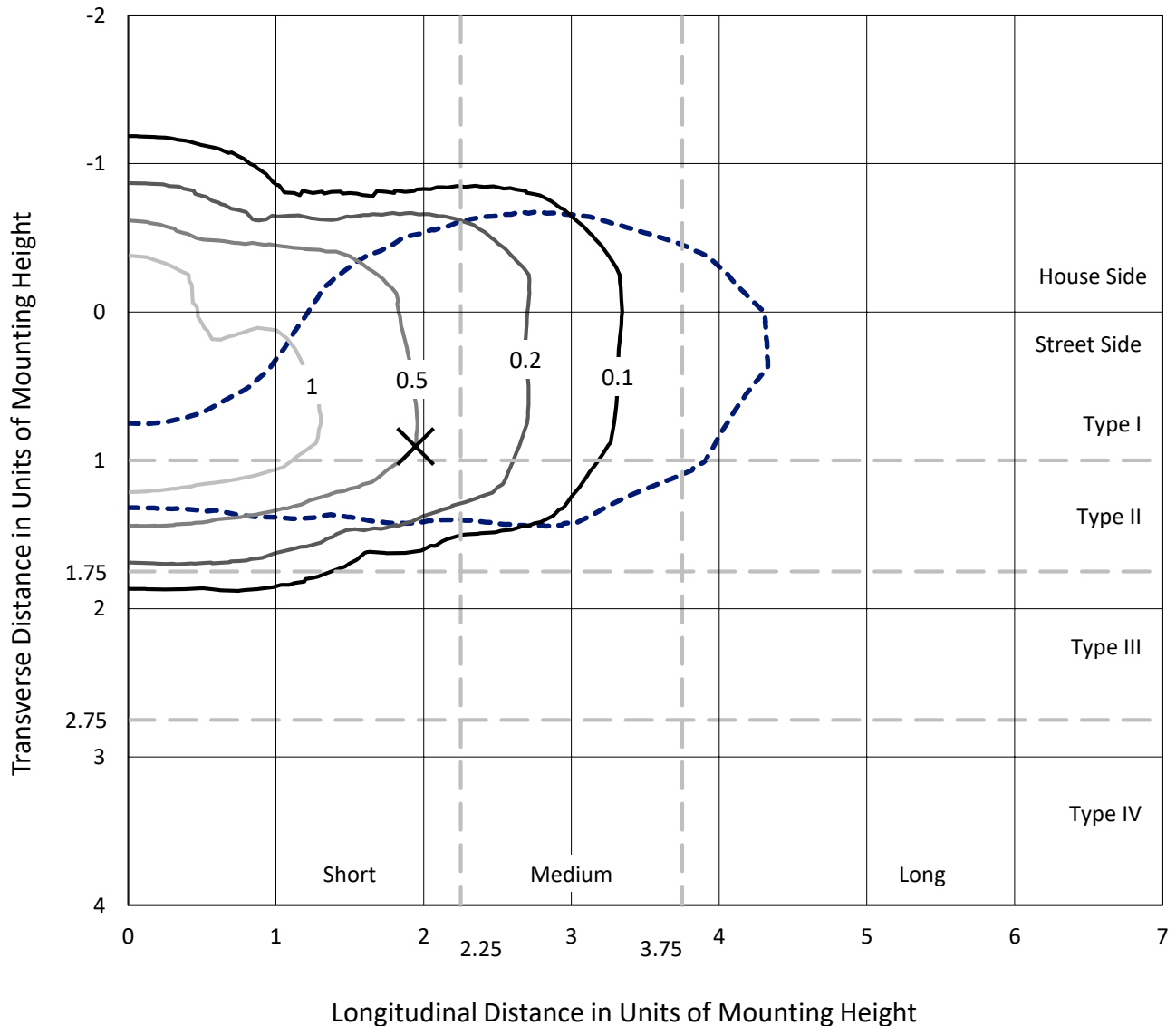


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

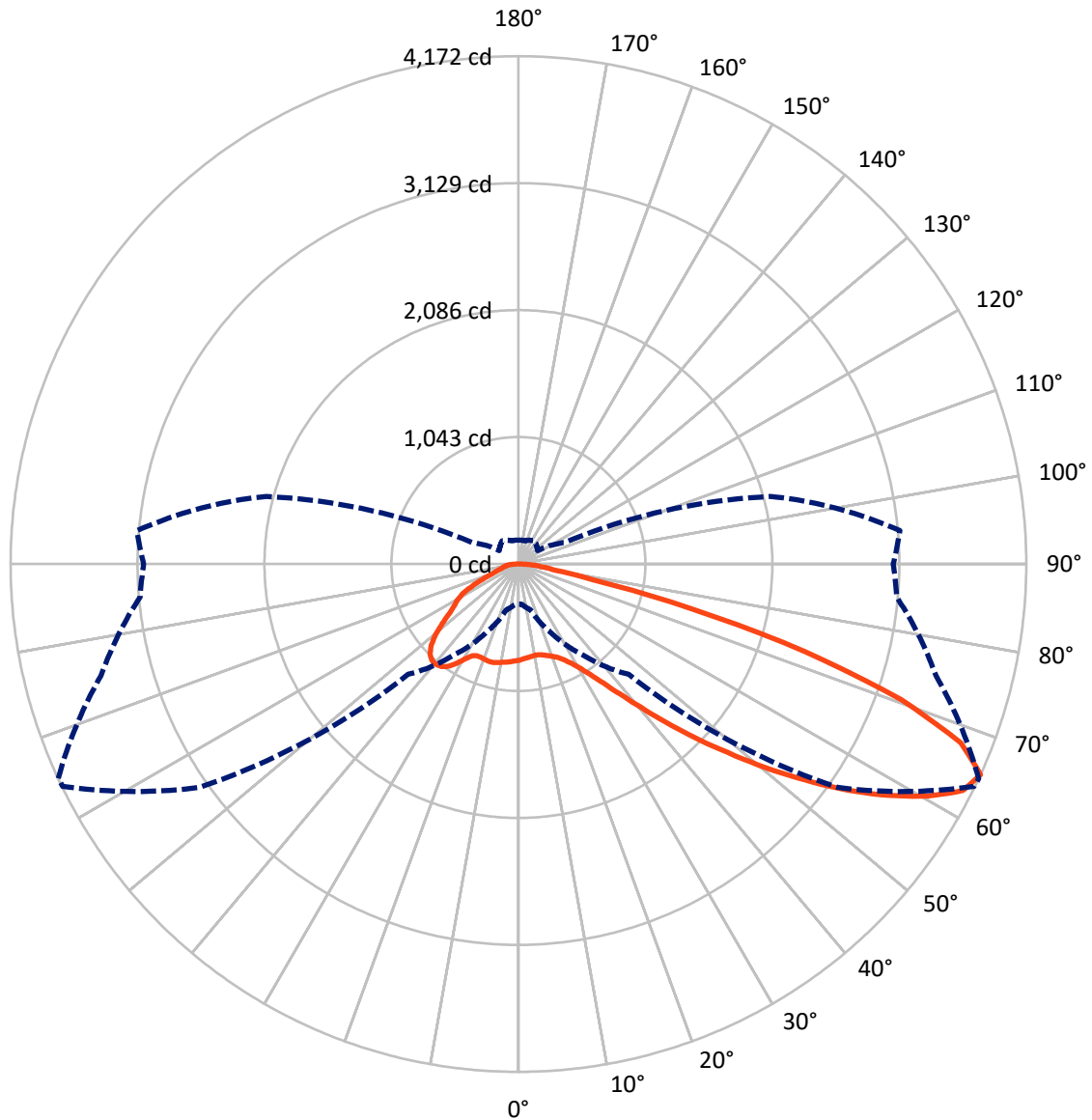


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1811.3	0.0	1811.3
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	4453.7	0.0	4453.7
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	6265.0	0.0	6265.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.4	1.2
10°-20°	225.2	3.6
20°-30°	400.0	6.4
30°-40°	676.7	10.8
40°-50°	1177.9	18.8
50°-60°	1522.3	24.3
60°-70°	1332.1	21.3
70°-80°	724.5	11.6
80°-90°	130.9	2.1
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°	6265.0	100.0
0°-180°	6265.0	100.0



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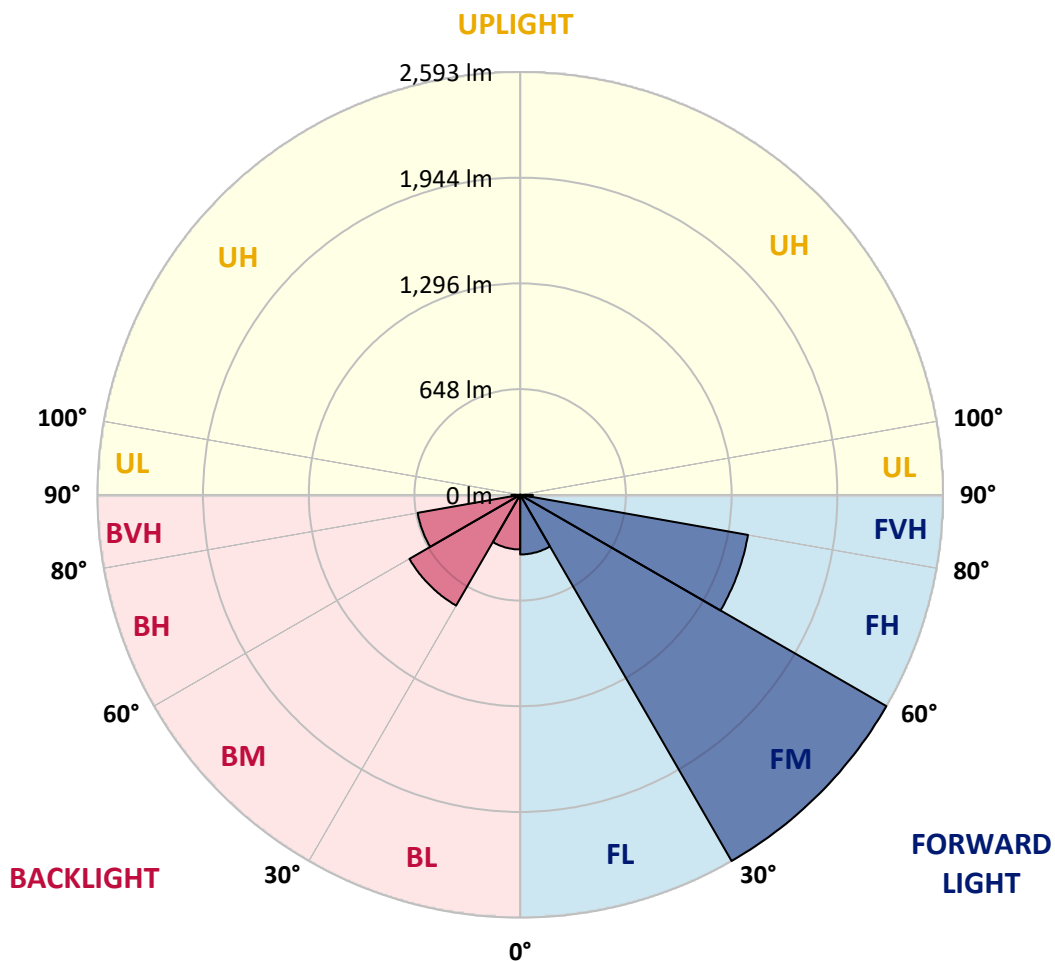
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	365.5	5.8			
FM	(30°-60°)	2592.6	41.4			
FH	(60°-80°)	1418.5	22.6			G1/1800
FVH	(80°-90°)	77.0	1.2			G1/100
BL	(0°-30°)	335.0	5.3	B1/500		
BM	(30°-60°)	784.3	12.5	B1/1000		
BH	(60°-80°)	638.1	10.2	B2/1000		G2/1000
BVH	(80°-90°)	53.9	0.9			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6
2.5°	777.6	776.8	775.2	776.8	777.6	779.3	778.4	780.1	779.3	781.7	785.9
5°	757.8	756.2	755.4	759.5	762.0	766.1	767.7	773.5	772.7	776.8	783.4
7.5°	735.6	735.6	734.7	739.7	743.0	750.4	756.2	766.1	766.9	774.3	781.7
10°	718.3	719.1	718.3	722.4	727.3	736.4	746.3	760.3	761.1	771.9	779.3
12.5°	711.7	711.7	711.7	717.4	724.0	736.4	747.9	762.8	764.4	776.0	782.6
15°	720.7	721.5	719.9	725.7	733.1	747.9	758.7	774.3	776.0	786.7	790.8
17.5°	752.9	756.2	752.1	755.4	753.7	765.3	775.2	790.8	791.6	800.7	802.4
20°	816.4	819.7	813.1	809.0	794.1	793.3	797.4	809.8	809.8	815.6	811.4
22.5°	914.5	917.8	906.3	890.6	855.1	837.8	828.8	834.5	833.7	836.2	825.5
25°	1044.8	1044.0	1030.0	1001.1	944.2	902.1	879.9	870.8	870.8	865.9	852.7
27.5°	1206.4	1194.1	1169.3	1134.7	1055.5	997.0	949.1	926.1	921.9	907.1	882.4
30°	1378.8	1369.7	1334.2	1283.9	1192.4	1117.4	1038.2	992.0	989.6	957.4	920.3
32.5°	1581.6	1566.8	1527.2	1467.0	1357.3	1251.8	1152.8	1082.7	1078.6	1027.5	976.4
35°	1842.2	1829.9	1753.2	1693.0	1552.0	1413.4	1296.3	1203.1	1199.8	1137.2	1072.0
37.5°	2154.8	2122.6	2048.4	1935.4	1787.0	1622.9	1474.4	1357.3	1353.2	1283.9	1201.5
40°	2433.5	2404.6	2338.6	2234.7	2075.6	1893.3	1692.1	1550.3	1546.2	1462.1	1358.2
42.5°	2639.6	2619.8	2577.0	2516.8	2403.0	2292.5	1970.0	1783.7	1776.2	1667.4	1537.9
45°	2759.2	2743.5	2718.8	2733.6	2732.0	2711.4	2301.5	2061.6	2037.7	1896.6	1738.3
47.5°	2730.3	2716.3	2726.2	2841.7	3000.8	3120.4	2687.5	2346.1	2313.9	2130.0	1951.9
50°	2521.7	2527.5	2579.4	2800.4	3157.5	3423.0	3115.4	2670.1	2627.3	2365.0	2154.8
52.5°	2141.6	2155.6	2281.7	2591.0	3140.2	3619.3	3502.2	3004.9	2948.0	2594.3	2339.5
55°	1701.2	1736.7	1899.9	2224.8	2914.2	3633.3	3794.1	3341.4	3278.7	2809.5	2500.3
57.5°	1258.4	1311.2	1500.0	1798.5	2481.3	3411.5	3940.1	3663.0	3587.1	3023.1	2670.1
60°	798.2	830.4	1048.1	1400.2	1899.1	2868.9	3921.1	3936.8	3870.8	3235.8	2847.4
62.5°	509.6	525.3	635.0	998.6	1327.7	2124.2	3714.1	4143.8	4099.2	3429.6	3015.7
65°	327.4	334.0	390.0	614.3	903.8	1282.3	3198.7	4166.0	4171.8	3550.8	3119.6
67.5°	266.4	269.7	290.3	379.3	639.1	708.4	2228.1	3849.4	3919.5	3519.5	3084.1
70°	242.4	246.6	268.0	302.6	494.8	489.0	1078.6	3221.0	3335.6	3338.9	2926.6
72.5°	204.5	210.3	239.1	286.1	382.6	385.9	456.8	2294.1	2463.2	2984.3	2689.9
75°	170.7	174.0	198.7	252.3	324.1	308.4	320.8	1216.3	1460.4	2393.1	2438.4
77.5°	138.5	141.8	160.0	201.2	287.8	240.0	252.3	503.8	622.6	1624.5	1993.1
80°	99.0	102.3	122.9	156.7	217.7	216.1	187.2	277.9	301.8	878.2	1294.7
82.5°	70.9	73.4	93.2	112.1	150.9	216.9	141.0	188.8	197.9	389.2	522.0
85°	47.8	47.8	64.3	74.2	97.3	136.9	113.8	127.8	133.6	184.7	141.0
87.5°	20.6	20.6	34.6	37.9	51.1	63.5	84.9	64.3	66.0	99.8	57.7
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°	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6	791.6
2.5°	788.3	789.2	790.8	795.8	799.1	804.0	806.5	809.8	809.8	808.1	809.0
5°	786.7	789.2	794.9	804.0	809.8	818.9	825.5	830.4	832.0	830.4	831.2
7.5°	785.9	790.0	799.9	813.1	821.3	832.9	841.9	847.7	851.8	850.2	851.0
10°	783.4	790.0	802.4	818.9	831.2	842.8	851.0	853.5	856.0	854.3	853.5
12.5°	786.7	794.1	807.3	827.1	841.1	850.2	852.7	848.5	842.8	839.5	838.6
15°	793.3	800.7	813.9	834.5	846.9	850.2	844.4	831.2	818.0	810.6	809.8
17.5°	802.4	807.3	818.0	836.2	846.1	841.9	830.4	814.7	804.8	799.1	799.9
20°	808.1	808.1	816.4	830.4	838.6	835.3	821.3	804.0	788.3	780.9	778.4
22.5°	816.4	812.3	813.1	825.5	837.0	832.0	802.4	771.9	749.6	741.3	740.5
25°	838.6	827.1	819.7	827.1	854.3	813.9	754.5	719.1	698.5	691.0	691.9
27.5°	865.9	850.2	834.5	846.9	868.3	772.7	693.5	653.1	640.7	635.0	637.4
30°	893.1	872.5	851.8	896.4	858.4	708.4	615.2	575.6	564.9	560.7	564.0
32.5°	943.4	909.6	884.8	962.3	827.9	635.0	530.2	494.0	484.1	479.1	477.5
35°	1027.5	984.6	959.9	1020.1	785.0	553.3	452.7	427.2	416.4	405.7	404.1
37.5°	1148.7	1096.8	1074.5	1053.1	724.8	472.5	393.3	376.0	360.4	343.9	343.0
40°	1293.8	1226.2	1209.7	1067.9	641.6	396.6	352.1	335.6	315.8	300.2	301.0
42.5°	1461.2	1374.7	1339.2	1063.8	538.5	356.2	322.4	304.3	287.0	273.0	272.1
45°	1640.2	1542.1	1460.4	1034.9	436.2	328.2	304.3	282.8	265.5	249.9	248.2
47.5°	1838.1	1728.4	1572.6	978.8	360.4	308.4	293.6	263.1	247.4	237.5	237.5
50°	2037.7	1906.5	1675.6	893.9	315.8	293.6	277.9	252.3	240.0	231.7	231.7
52.5°	2208.4	2092.1	1760.6	792.5	287.8	281.2	267.2	247.4	234.2	226.8	225.9
55°	2374.1	2264.4	1836.4	691.9	264.7	264.7	264.7	243.3	228.4	221.8	221.0
57.5°	2539.0	2445.8	1915.6	625.9	244.1	250.7	259.8	238.3	223.5	217.7	216.9
60°	2725.4	2663.5	2007.1	579.7	225.9	235.8	253.2	232.5	215.2	210.3	209.5
62.5°	2923.3	2923.3	2090.4	514.6	209.5	223.5	243.3	225.1	207.8	203.7	202.9
65°	3078.3	3145.1	2144.0	417.3	193.0	211.1	231.7	215.2	197.9	197.1	195.4
67.5°	3096.5	3201.2	2110.2	315.0	178.1	197.9	220.2	204.5	188.0	188.0	185.5
70°	2966.2	3072.6	2004.7	235.8	167.4	184.7	205.3	191.3	175.6	177.3	173.2
72.5°	2748.5	2774.9	1742.4	186.4	155.0	170.7	187.2	176.5	162.5	162.5	156.7
75°	2461.5	2314.7	1265.8	155.9	140.2	154.2	169.0	160.0	147.6	143.5	140.2
77.5°	1959.3	1677.3	735.6	134.4	127.8	138.5	148.4	141.8	131.1	122.0	122.0
80°	1194.1	983.0	324.9	116.3	113.0	121.2	127.8	120.4	111.3	102.3	99.8
82.5°	454.4	379.3	157.5	99.8	99.0	103.9	108.9	101.4	94.8	90.7	78.3
85°	124.5	114.6	108.0	83.3	81.6	80.8	86.6	83.3	74.2	61.0	54.4
87.5°	47.0	53.6	58.5	51.1	54.4	50.3	57.7	52.8	47.0	30.5	27.2
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)