

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: P397845

Luminaire Tested: **ARCH-S-PA1-50-740-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397845  
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-PA1-50-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 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: 7884 lumens  
Efficiency: N/A  
Efficacy: 146.0 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

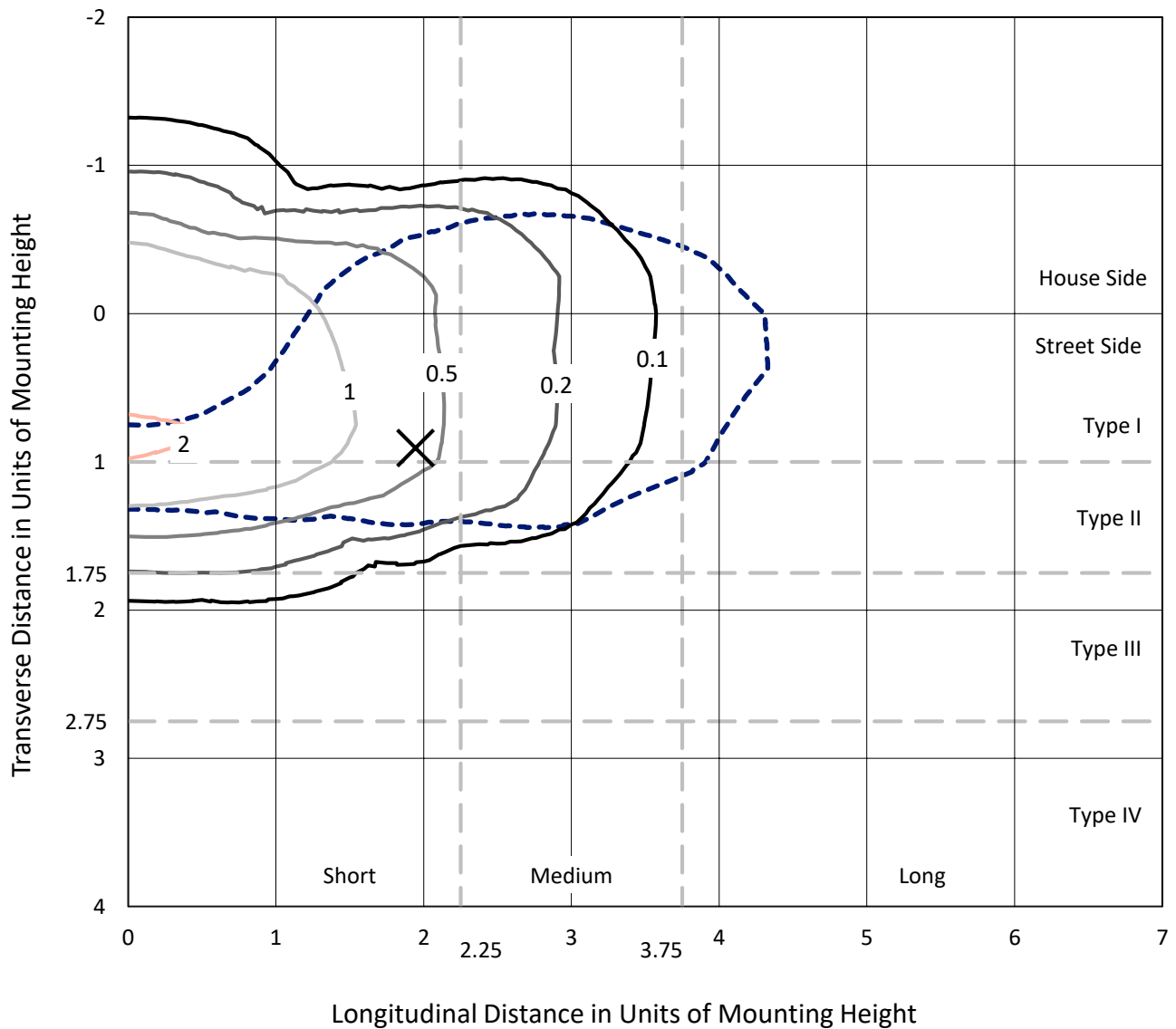
Input Watts (W): 54  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397845  
 CATALOG NUMBER: ARCH-S-PA1-50-740-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

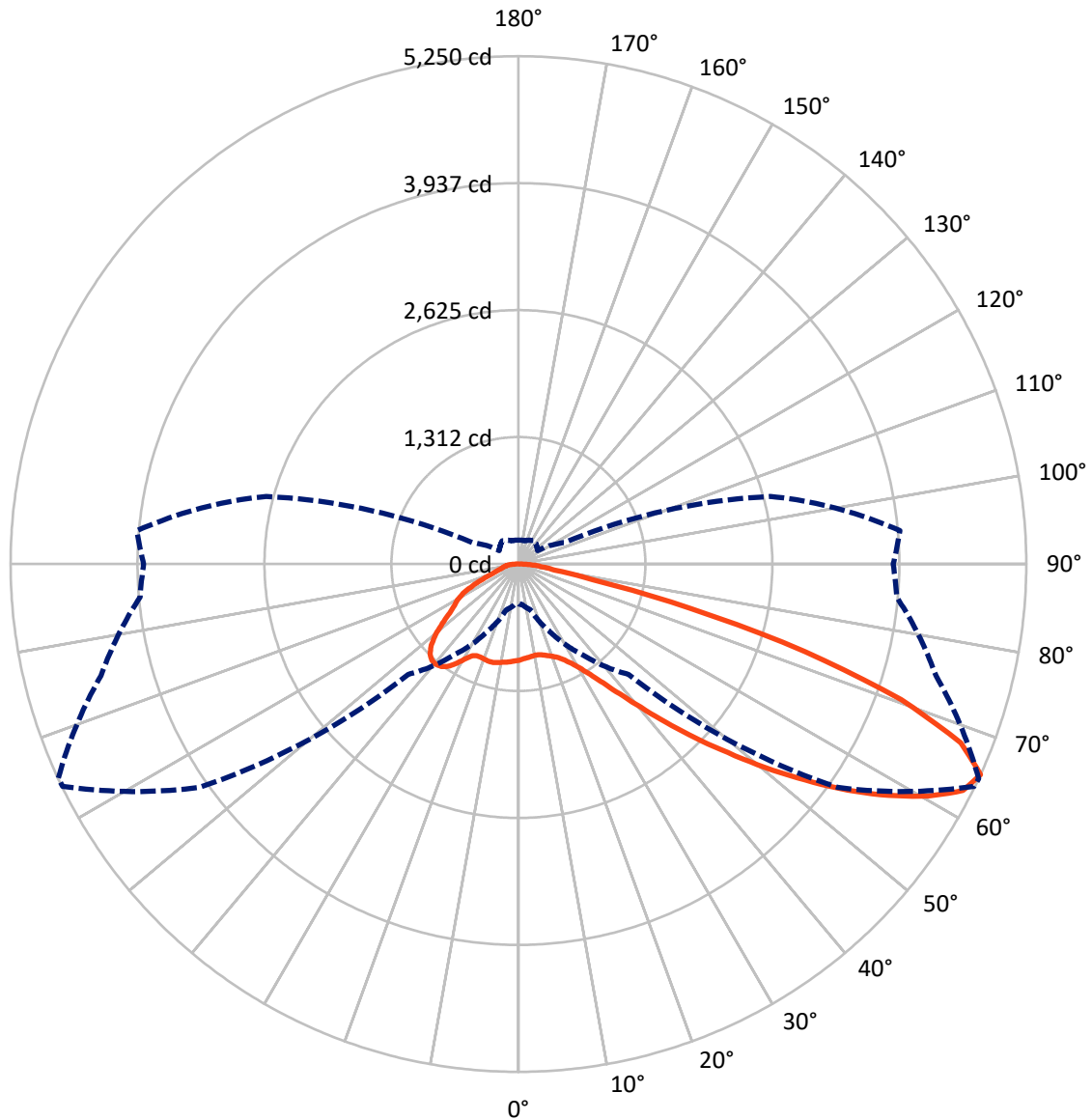
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P397845  
CATALOG NUMBER: ARCH-S-PA1-50-740-U-T2U

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397845

CATALOG NUMBER: ARCH-S-PA1-50-740-U-T2U

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2279.4	0.0	2279.4
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	5604.6	0.0	5604.6
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	7884.0	0.0	7884.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.9	1.2
10°-20°	283.4	3.6
20°-30°	503.3	6.4
30°-40°	851.5	10.8
40°-50°	1482.3	18.8
50°-60°	1915.7	24.3
60°-70°	1676.3	21.3
70°-80°	911.8	11.6
80°-90°	164.7	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°	7884.0	100.0
0°-180°	7884.0	100.0



REPORT NUMBER: P397845

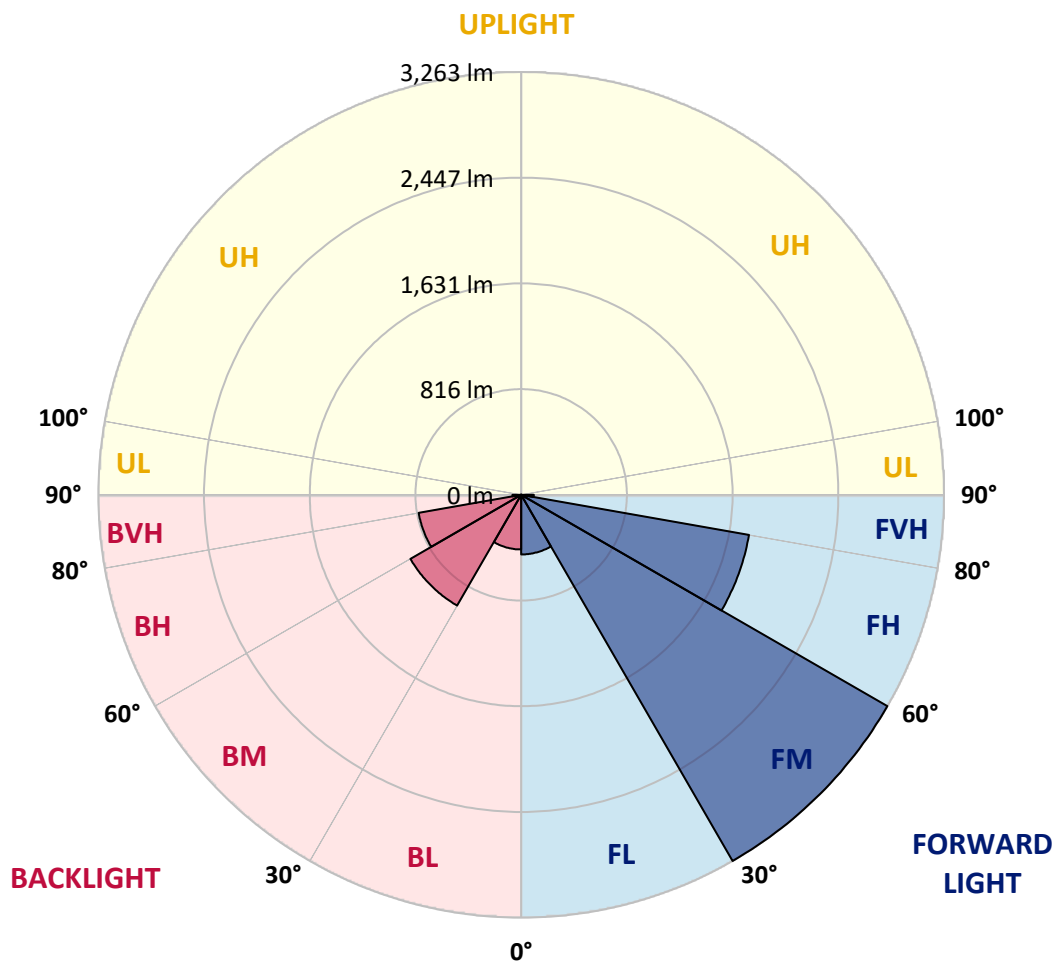
CATALOG NUMBER: ARCH-S-PA1-50-740-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	460.0	5.8			
FM	(30°-60°)	3262.6	41.4			
FH	(60°-80°)	1785.0	22.6			G1/1800
FVH	(80°-90°)	96.9	1.2			G1/100
BL	(0°-30°)	421.6	5.3	B1/500		
BM	(30°-60°)	986.9	12.5	B1/1000		
BH	(60°-80°)	803.1	10.2	B2/1000		G2/1000
BVH	(80°-90°)	67.8	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





REPORT NUMBER: P397845

CATALOG NUMBER: ARCH-S-PA1-50-740-U-T2U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2
2.5°	978.6	977.5	975.5	977.5	978.6	980.7	979.6	981.7	980.7	983.8	989.0
5°	953.7	951.6	950.6	955.7	958.9	964.0	966.1	973.4	972.4	977.5	985.8
7.5°	925.7	925.7	924.6	930.8	935.0	944.3	951.6	964.0	965.1	974.4	983.8
10°	903.9	904.9	903.9	909.1	915.3	926.7	939.1	956.8	957.8	971.3	980.7
12.5°	895.6	895.6	895.6	902.8	911.1	926.7	941.2	959.9	962.0	976.5	984.8
15°	907.0	908.0	905.9	913.2	922.5	941.2	954.7	974.4	976.5	990.0	995.2
17.5°	947.4	951.6	946.4	950.6	948.5	963.0	975.5	995.2	996.2	1007.6	1009.7
20°	1027.4	1031.5	1023.2	1018.0	999.3	998.3	1003.5	1019.0	1019.0	1026.3	1021.1
22.5°	1150.8	1155.0	1140.5	1120.7	1076.1	1054.3	1042.9	1050.2	1049.1	1052.3	1038.8
25°	1314.8	1313.8	1296.1	1259.8	1188.2	1135.3	1107.3	1095.8	1095.8	1089.6	1073.0
27.5°	1518.2	1502.6	1471.5	1427.9	1328.3	1254.6	1194.4	1165.4	1160.2	1141.5	1110.4
30°	1735.1	1723.7	1679.0	1615.7	1500.6	1406.1	1306.5	1248.4	1245.3	1204.8	1158.1
32.5°	1990.4	1971.7	1921.9	1846.1	1708.1	1575.3	1450.7	1362.5	1357.3	1293.0	1228.7
35°	2318.3	2302.7	2206.2	2130.5	1953.0	1778.7	1631.3	1514.0	1509.9	1431.0	1349.0
37.5°	2711.6	2671.1	2577.7	2435.5	2248.8	2042.2	1855.5	1708.1	1702.9	1615.7	1512.0
40°	3062.3	3026.0	2943.0	2812.2	2612.0	2382.6	2129.4	1950.9	1945.7	1839.9	1709.1
42.5°	3321.8	3296.9	3242.9	3167.1	3023.9	2884.9	2479.1	2244.6	2235.3	2098.3	1935.4
45°	3472.2	3452.5	3421.4	3440.1	3438.0	3412.1	2896.3	2594.3	2564.2	2386.8	2187.5
47.5°	3435.9	3418.3	3430.7	3576.0	3776.3	3926.8	3382.0	2952.3	2911.9	2680.5	2456.3
50°	3173.4	3180.6	3246.0	3524.1	3973.5	4307.6	3920.5	3360.2	3306.2	2976.2	2711.6
52.5°	2695.0	2712.6	2871.4	3260.5	3951.7	4554.6	4407.2	3781.5	3709.9	3264.7	2944.0
55°	2140.8	2185.5	2390.9	2799.8	3667.3	4572.2	4774.6	4204.9	4126.0	3535.5	3146.4
57.5°	1583.6	1650.0	1887.6	2263.3	3122.5	4293.1	4958.3	4609.6	4514.1	3804.3	3360.2
60°	1004.5	1045.0	1319.0	1762.1	2389.9	3610.3	4934.4	4954.1	4871.1	4072.0	3583.3
62.5°	641.3	661.0	799.1	1256.7	1670.7	2673.2	4673.9	5214.6	5158.5	4315.9	3795.0
65°	412.0	420.3	490.8	773.1	1137.4	1613.7	4025.3	5242.6	5249.9	4468.5	3925.7
67.5°	335.2	339.3	365.3	477.4	804.2	891.4	2803.9	4844.1	4932.3	4429.0	3881.1
70°	305.1	310.3	337.3	380.8	622.6	615.4	1357.3	4053.4	4197.6	4201.8	3682.9
72.5°	257.4	264.6	300.9	360.1	481.5	485.7	574.9	2887.0	3099.7	3755.5	3385.1
75°	214.8	219.0	250.1	317.5	407.8	388.1	403.7	1530.6	1837.8	3011.5	3068.6
77.5°	174.3	178.5	201.3	253.2	362.2	302.0	317.5	634.1	783.5	2044.3	2508.2
80°	124.5	128.7	154.6	197.2	274.0	271.9	235.6	349.7	379.8	1105.2	1629.2
82.5°	89.2	92.4	117.3	141.1	189.9	272.9	177.5	237.6	249.1	489.8	656.9
85°	60.2	60.2	80.9	93.4	122.5	172.3	143.2	160.8	168.1	232.5	177.5
87.5°	25.9	25.9	43.6	47.7	64.3	79.9	106.9	80.9	83.0	125.6	72.6
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: P397845

CATALOG NUMBER: ARCH-S-PA1-50-740-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2
2.5°	992.1	993.1	995.2	1001.4	1005.6	1011.8	1014.9	1019.0	1019.0	1017.0	1018.0
5°	990.0	993.1	1000.4	1011.8	1019.0	1030.5	1038.8	1045.0	1047.1	1045.0	1046.0
7.5°	989.0	994.1	1006.6	1023.2	1033.6	1048.1	1059.5	1066.8	1072.0	1069.9	1070.9
10°	985.8	994.1	1009.7	1030.5	1046.0	1060.6	1070.9	1074.0	1077.2	1075.1	1074.0
12.5°	990.0	999.3	1015.9	1040.8	1058.5	1069.9	1073.0	1067.8	1060.6	1056.4	1055.4
15°	998.3	1007.6	1024.2	1050.2	1065.7	1069.9	1062.6	1046.0	1029.4	1020.1	1019.0
17.5°	1009.7	1015.9	1029.4	1052.3	1064.7	1059.5	1045.0	1025.3	1012.8	1005.6	1006.6
20°	1017.0	1017.0	1027.4	1045.0	1055.4	1051.2	1033.6	1011.8	992.1	982.7	979.6
22.5°	1027.4	1022.2	1023.2	1038.8	1053.3	1047.1	1009.7	971.3	943.3	932.9	931.9
25°	1055.4	1040.8	1031.5	1040.8	1075.1	1024.2	949.5	904.9	879.0	869.6	870.7
27.5°	1089.6	1069.9	1050.2	1065.7	1092.7	972.4	872.7	821.9	806.3	799.1	802.2
30°	1123.9	1097.9	1072.0	1128.0	1080.3	891.4	774.1	724.3	710.8	705.7	709.8
32.5°	1187.2	1144.6	1113.5	1211.0	1041.9	799.1	667.3	621.6	609.1	602.9	600.8
35°	1293.0	1239.0	1207.9	1283.7	987.9	696.3	569.7	537.5	524.1	510.6	508.5
37.5°	1445.6	1380.2	1352.2	1325.2	912.2	594.6	495.0	473.2	453.5	432.7	431.7
40°	1628.2	1543.1	1522.3	1343.9	807.4	499.1	443.1	422.4	397.5	377.7	378.8
42.5°	1838.9	1729.9	1685.3	1338.7	677.6	448.3	405.8	382.9	361.1	343.5	342.5
45°	2064.0	1940.6	1837.8	1302.3	549.0	413.0	382.9	355.9	334.1	314.4	312.4
47.5°	2313.1	2175.1	1978.9	1231.8	453.5	388.1	369.4	331.0	311.3	298.9	298.9
50°	2564.2	2399.2	2108.7	1124.9	397.5	369.4	349.7	317.5	302.0	291.6	291.6
52.5°	2779.0	2632.7	2215.6	997.3	362.2	353.9	336.2	311.3	294.7	285.4	284.3
55°	2987.6	2849.6	2311.0	870.7	333.1	333.1	333.1	306.1	287.5	279.1	278.1
57.5°	3195.2	3077.9	2410.6	787.6	307.2	315.5	326.9	299.9	281.2	274.0	272.9
60°	3429.7	3351.9	2525.8	729.5	284.3	296.8	318.6	292.6	270.8	264.6	263.6
62.5°	3678.7	3678.7	2630.6	647.5	263.6	281.2	306.1	283.3	261.5	256.3	255.3
65°	3873.8	3957.9	2698.1	525.1	242.8	265.7	291.6	270.8	249.1	248.0	245.9
67.5°	3896.7	4028.5	2655.5	396.4	224.1	249.1	277.1	257.4	236.6	236.6	233.5
70°	3732.7	3866.6	2522.7	296.8	210.7	232.5	258.4	240.8	221.0	223.1	217.9
72.5°	3458.7	3492.0	2192.7	234.5	195.1	214.8	235.6	222.1	204.4	204.4	197.2
75°	3097.6	2912.9	1592.9	196.1	176.4	194.1	212.7	201.3	185.8	180.6	176.4
77.5°	2465.6	2110.7	925.7	169.1	160.8	174.3	186.8	178.5	165.0	153.6	153.6
80°	1502.6	1237.0	408.9	146.3	142.2	152.5	160.8	151.5	140.1	128.7	125.6
82.5°	571.8	477.4	198.2	125.6	124.5	130.8	137.0	127.6	119.3	114.2	98.6
85°	156.7	144.2	135.9	104.8	102.7	101.7	109.0	104.8	93.4	76.8	68.5
87.5°	59.2	67.5	73.7	64.3	68.5	63.3	72.6	66.4	59.2	38.4	34.2
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)