

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: P348965

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-830-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5389 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

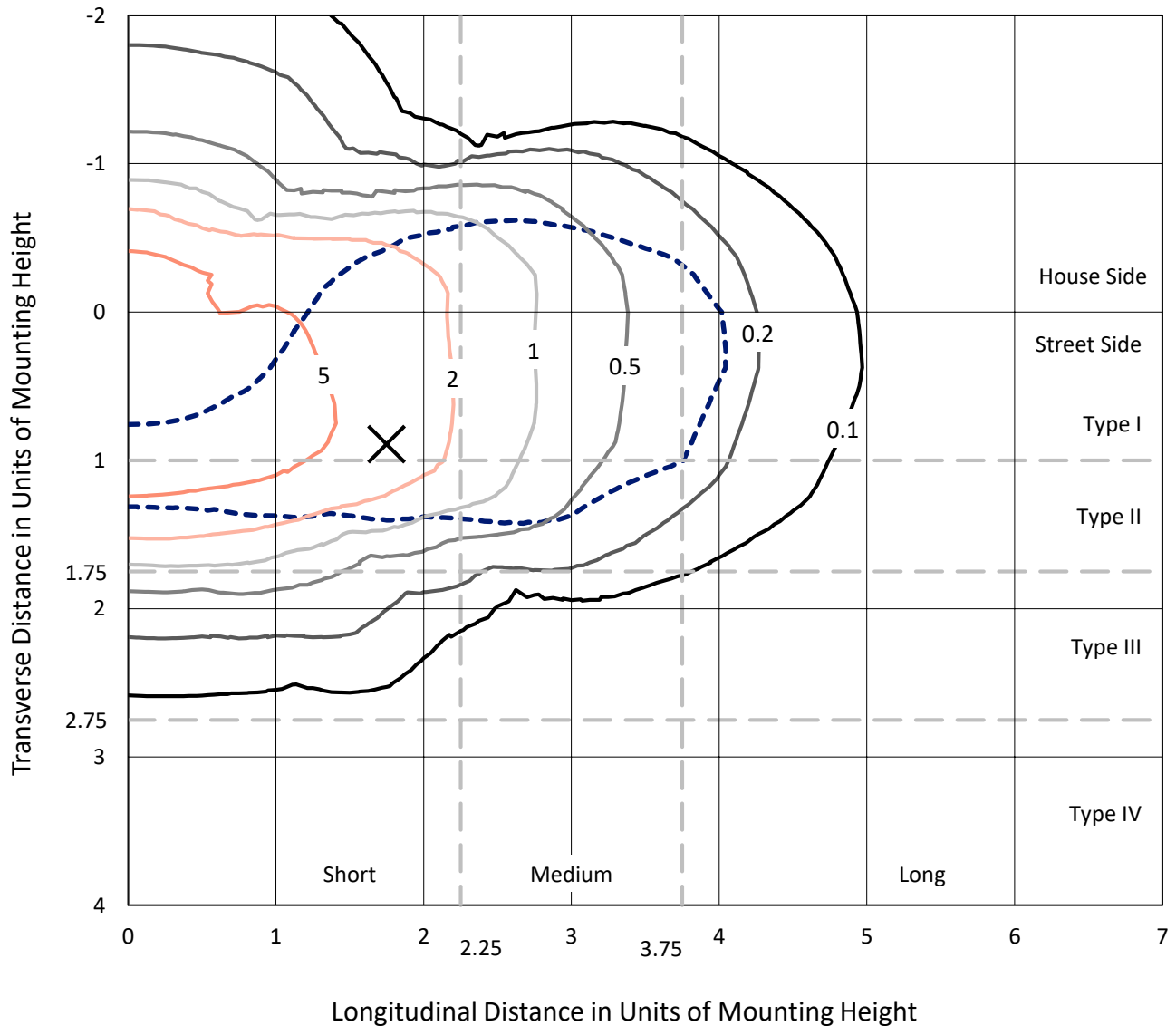
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

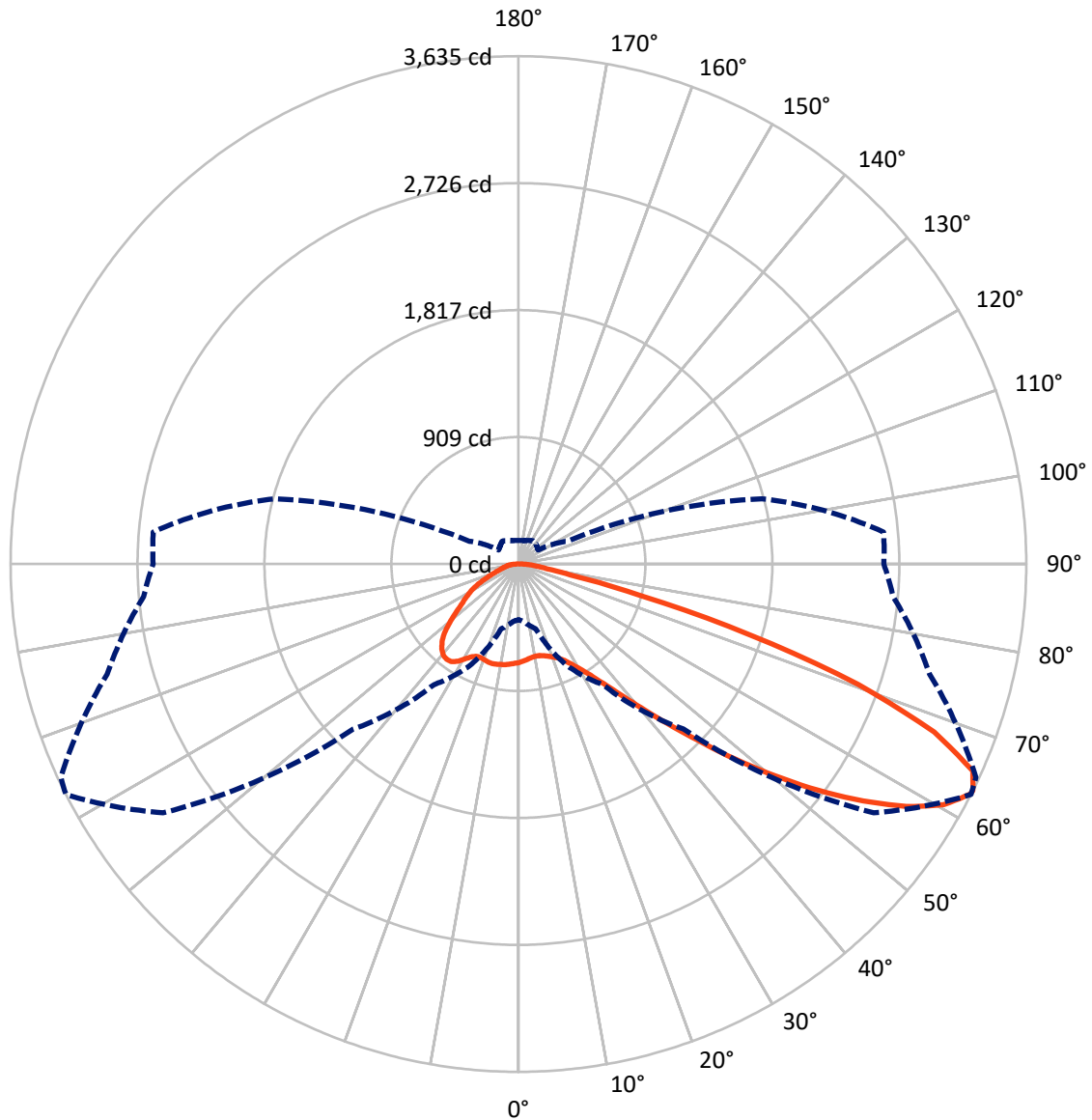
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1538.5	0.0	1538.5
	% Fixture	28.5	0.0	28.5
Street Side	Lumens	3850.5	0.0	3850.5
	% Fixture	71.5	0.0	71.5
Total	Lumens	5389.0	0.0	5389.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	1.2
10°-20°	197.5	3.7
20°-30°	346.9	6.4
30°-40°	584.7	10.9
40°-50°	1024.3	19.0
50°-60°	1323.9	24.6
60°-70°	1146.0	21.3
70°-80°	594.9	11.0
80°-90°	103.7	1.9
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°	5389.0	100.0
0°-180°	5389.0	100.0



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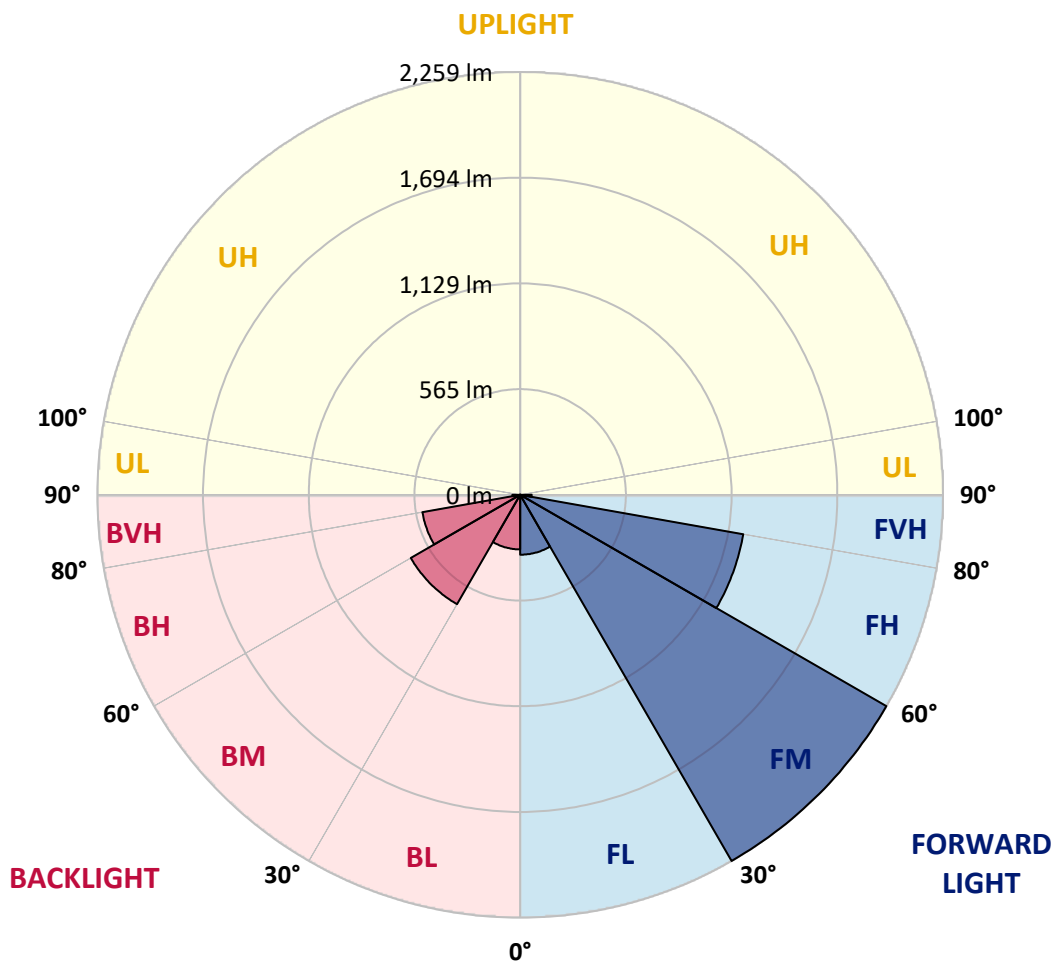
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	319.9	5.9			
FM	(30°-60°)	2258.6	41.9			
FH	(60°-80°)	1210.2	22.5			G1/1800
FVH	(80°-90°)	61.7	1.1			G1/100
BL	(0°-30°)	291.4	5.4	B1/500		
BM	(30°-60°)	674.4	12.5	B1/1000		
BH	(60°-80°)	530.7	9.8	B2/1000		G2/1000
BVH	(80°-90°)	41.9	0.8			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°	63°	65°	75°	85°
0°	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6
2.5°	688.9	686.9	690.4	692.0	691.5	694.5	694.5	695.0	695.0	697.5	700.0
5°	668.8	667.8	671.3	673.8	675.8	680.4	683.4	684.9	686.4	689.9	696.0
7.5°	649.6	648.1	653.1	655.1	658.2	664.7	671.8	675.8	677.8	685.4	694.0
10°	634.0	633.5	637.5	639.5	643.0	652.6	662.7	671.3	672.8	682.9	691.0
12.5°	626.4	625.4	629.9	632.4	638.5	650.1	661.7	672.3	674.8	686.4	693.5
15°	632.4	633.5	637.5	638.0	645.1	657.2	670.3	680.9	683.4	695.0	700.0
17.5°	661.2	660.7	663.2	662.2	664.7	670.8	684.9	693.5	696.5	705.1	709.1
20°	713.1	711.6	713.6	707.1	696.0	693.0	701.5	711.1	712.1	717.2	714.7
22.5°	792.3	793.8	789.3	772.7	745.9	733.3	727.8	730.8	734.3	733.8	726.3
25°	895.7	900.8	892.2	862.9	818.0	788.8	768.6	764.1	766.6	759.5	747.9
27.5°	1031.4	1035.4	1016.8	971.4	910.8	867.5	827.1	811.5	811.5	796.4	775.2
30°	1180.7	1183.2	1153.4	1095.9	1025.8	961.3	901.8	871.5	869.0	839.2	805.9
32.5°	1362.2	1355.2	1319.9	1248.8	1160.5	1071.7	995.1	949.2	944.1	899.2	856.9
35°	1596.8	1596.8	1523.6	1442.4	1335.0	1222.0	1121.2	1050.0	1045.0	994.1	939.1
37.5°	1851.4	1850.4	1784.4	1672.4	1543.8	1405.6	1270.9	1182.2	1170.6	1116.1	1054.6
40°	2105.1	2096.6	2043.1	1936.7	1799.5	1641.6	1456.0	1352.7	1347.1	1269.4	1192.3
42.5°	2290.7	2282.7	2257.4	2186.3	2096.1	1982.1	1696.6	1556.9	1548.8	1451.0	1356.7
45°	2393.1	2381.5	2378.0	2379.0	2389.1	2388.6	1993.7	1798.5	1770.2	1656.8	1531.2
47.5°	2369.9	2342.7	2379.0	2472.3	2629.1	2732.0	2339.7	2085.5	2033.0	1870.6	1717.3
50°	2182.8	2169.7	2247.4	2437.5	2759.8	3001.4	2720.4	2383.5	2309.4	2072.9	1893.3
52.5°	1854.5	1879.7	1975.5	2245.8	2736.1	3164.3	3066.4	2693.2	2590.3	2265.5	2046.1
55°	1476.2	1508.0	1643.2	1929.6	2516.7	3166.3	3316.1	2993.3	2901.5	2464.7	2202.5
57.5°	1074.3	1119.1	1288.1	1550.9	2131.9	2949.9	3439.1	3274.2	3169.3	2660.9	2355.3
60°	674.8	706.6	890.7	1195.3	1629.5	2472.3	3408.4	3499.1	3412.4	2846.0	2529.8
62.5°	434.7	449.9	529.6	853.4	1136.3	1813.1	3180.9	3628.3	3590.9	3015.0	2661.4
63°	398.4	411.5	479.6	788.8	1053.6	1670.4	3104.2	3634.8	3612.6	3046.7	2692.2
65°	285.0	299.1	334.4	542.2	777.7	1120.7	2659.9	3573.8	3598.5	3099.7	2734.1
67.5°	224.9	229.5	245.6	329.3	551.8	636.5	1789.9	3209.1	3317.6	3043.2	2672.0
70°	201.2	204.8	222.9	252.7	417.6	412.6	933.5	2580.2	2804.7	2850.6	2515.7
72.5°	175.5	178.0	200.2	238.1	318.7	315.2	406.0	1734.9	2007.8	2497.5	2299.3
75°	145.3	147.8	166.4	211.3	269.8	249.1	254.2	906.8	1150.9	1957.9	2016.4
77.5°	119.5	121.0	136.7	170.0	237.5	192.2	196.7	381.3	559.3	1334.5	1592.2
80°	86.7	87.3	101.9	129.1	181.6	173.5	146.3	207.8	253.7	731.3	1001.6
82.5°	60.5	61.0	76.2	90.3	125.1	173.0	106.4	139.2	152.3	336.9	445.8
85°	42.4	41.4	51.9	59.5	79.2	104.9	81.2	89.3	94.3	145.8	120.0
87.5°	18.7	18.2	29.3	31.8	39.8	48.4	64.6	46.9	49.9	70.6	37.8
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°	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6	705.6
2.5°	700.5	702.6	705.6	710.1	713.6	715.2	718.2	718.7	723.2	719.2	719.7
5°	699.5	702.0	708.6	716.7	722.2	726.3	733.8	736.3	740.9	738.9	738.4
7.5°	698.0	702.6	712.1	723.7	732.3	738.9	745.9	750.5	755.0	754.0	753.0
10°	696.0	701.5	715.2	726.8	738.9	745.9	751.0	751.5	753.0	752.0	749.5
12.5°	697.5	703.6	719.2	730.8	743.4	748.4	746.9	739.4	732.8	727.3	726.3
15°	702.6	709.6	724.2	734.8	744.9	741.9	732.8	716.2	704.1	697.0	697.5
17.5°	707.6	713.6	724.7	733.3	738.4	729.3	715.2	701.0	695.5	689.9	688.9
20°	712.1	713.1	720.2	727.8	727.3	720.2	707.1	689.9	678.8	669.8	670.3
22.5°	719.2	715.2	715.7	720.2	725.8	719.2	688.4	658.7	642.0	631.4	630.9
25°	735.3	726.8	718.7	721.2	742.4	700.5	648.6	609.8	595.1	585.5	586.6
27.5°	757.5	745.9	729.8	743.4	755.0	663.7	591.6	551.8	541.7	531.6	534.1
30°	781.7	765.1	745.4	791.3	740.9	605.2	521.0	484.7	475.6	466.0	468.0
32.5°	825.1	800.4	774.7	848.8	708.1	534.1	446.8	414.1	408.0	402.0	402.5
35°	897.2	868.0	840.2	892.7	665.7	460.0	380.3	357.1	352.0	345.0	345.0
37.5°	1003.6	957.7	943.1	915.9	607.7	390.9	331.4	315.7	305.1	295.5	295.5
40°	1127.2	1072.7	1061.1	923.0	532.1	333.4	297.1	283.4	269.3	255.2	256.2
42.5°	1277.5	1203.9	1177.1	913.4	440.3	296.6	272.9	257.2	243.6	231.5	229.5
45°	1447.0	1353.7	1286.1	885.6	357.1	273.9	257.2	238.6	221.4	210.8	208.8
47.5°	1620.0	1516.1	1382.4	830.2	298.6	257.7	246.6	220.4	208.3	201.2	200.2
50°	1785.4	1676.9	1462.1	742.9	264.8	246.1	231.0	211.8	201.7	195.7	195.2
52.5°	1932.1	1829.8	1529.2	652.6	242.1	236.5	223.9	207.8	197.2	191.7	190.6
55°	2071.8	1984.6	1595.7	571.9	222.4	220.4	220.4	203.8	192.2	187.1	186.1
57.5°	2225.2	2160.6	1662.8	512.9	204.8	208.8	215.9	199.2	186.6	182.1	181.6
60°	2402.2	2364.4	1733.4	461.0	189.1	196.2	209.3	193.2	180.1	176.5	175.5
62.5°	2583.3	2584.3	1794.5	398.4	176.0	186.6	201.7	187.6	174.0	171.5	171.0
63°	2615.0	2624.1	1803.0	384.8	173.0	184.6	199.7	185.6	172.5	170.0	169.5
65°	2693.2	2733.0	1810.1	327.3	161.9	177.0	192.2	179.0	165.9	165.4	164.4
67.5°	2674.5	2739.6	1766.2	256.7	149.3	166.4	181.6	169.5	157.9	157.9	155.8
70°	2535.3	2577.7	1631.6	198.2	139.7	155.3	169.0	159.4	147.3	148.3	144.2
72.5°	2322.0	2275.6	1342.1	154.8	128.1	142.7	154.3	146.3	135.7	134.7	130.1
75°	2009.3	1856.5	961.3	125.1	114.0	126.1	138.2	132.1	122.6	117.0	116.0
77.5°	1531.2	1317.9	576.0	105.9	101.9	112.0	119.5	115.0	107.4	100.9	101.4
80°	911.9	760.0	259.7	89.8	88.3	95.8	101.9	98.3	93.3	85.2	83.2
82.5°	369.2	294.0	116.5	72.6	74.6	80.2	85.7	82.7	78.7	76.7	65.1
85°	95.8	92.3	68.1	54.5	57.5	60.0	67.6	67.6	64.1	52.5	48.4
87.5°	27.2	36.3	37.8	34.3	38.8	39.3	46.9	46.9	47.9	32.3	29.3
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)