

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: P348923

Luminaire Tested: **ARCH-N-PA1-50-727-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348923
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-PA1-50-727-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5672 lumens
Efficiency: N/A
Efficacy: 109.1 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

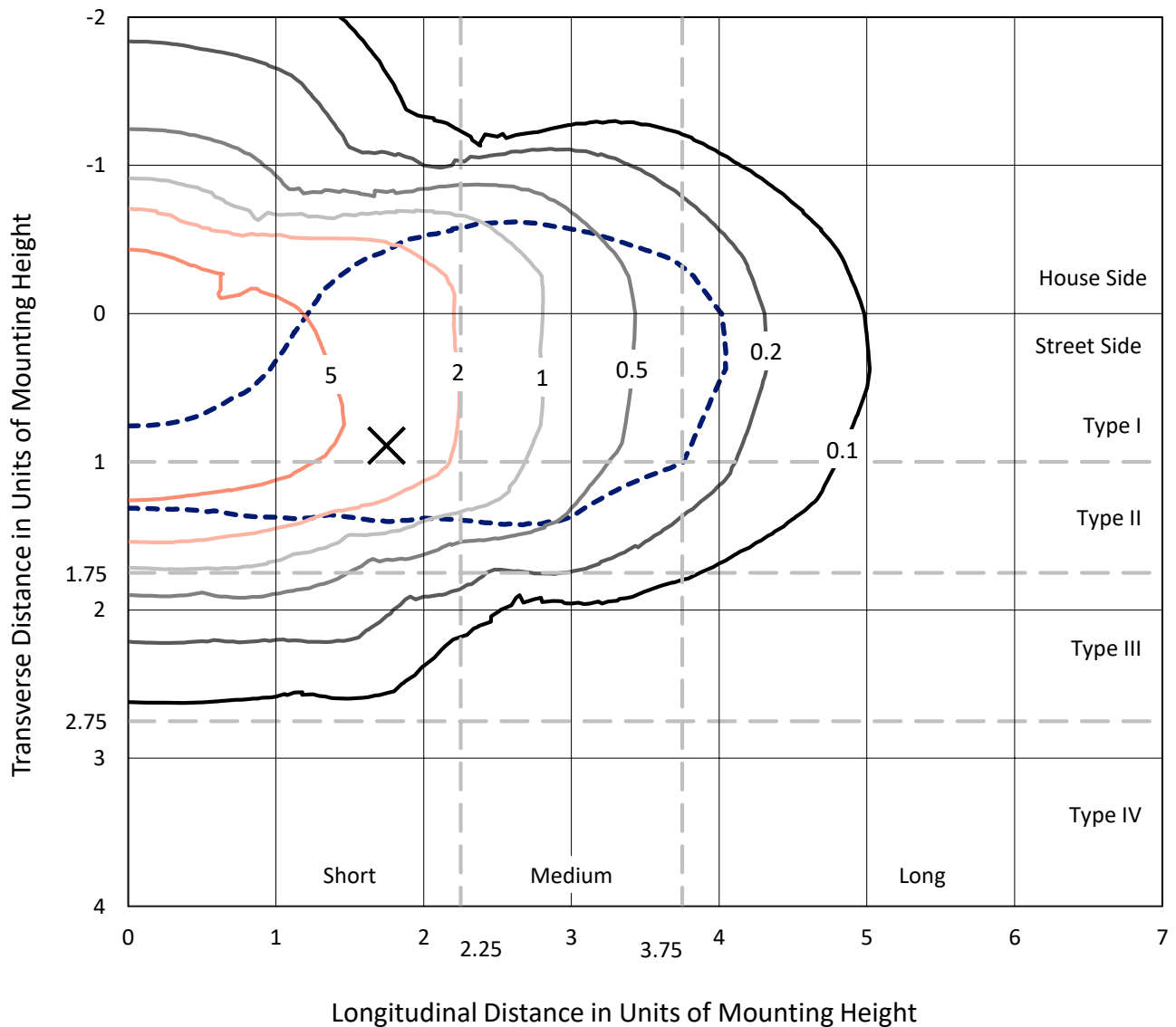
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

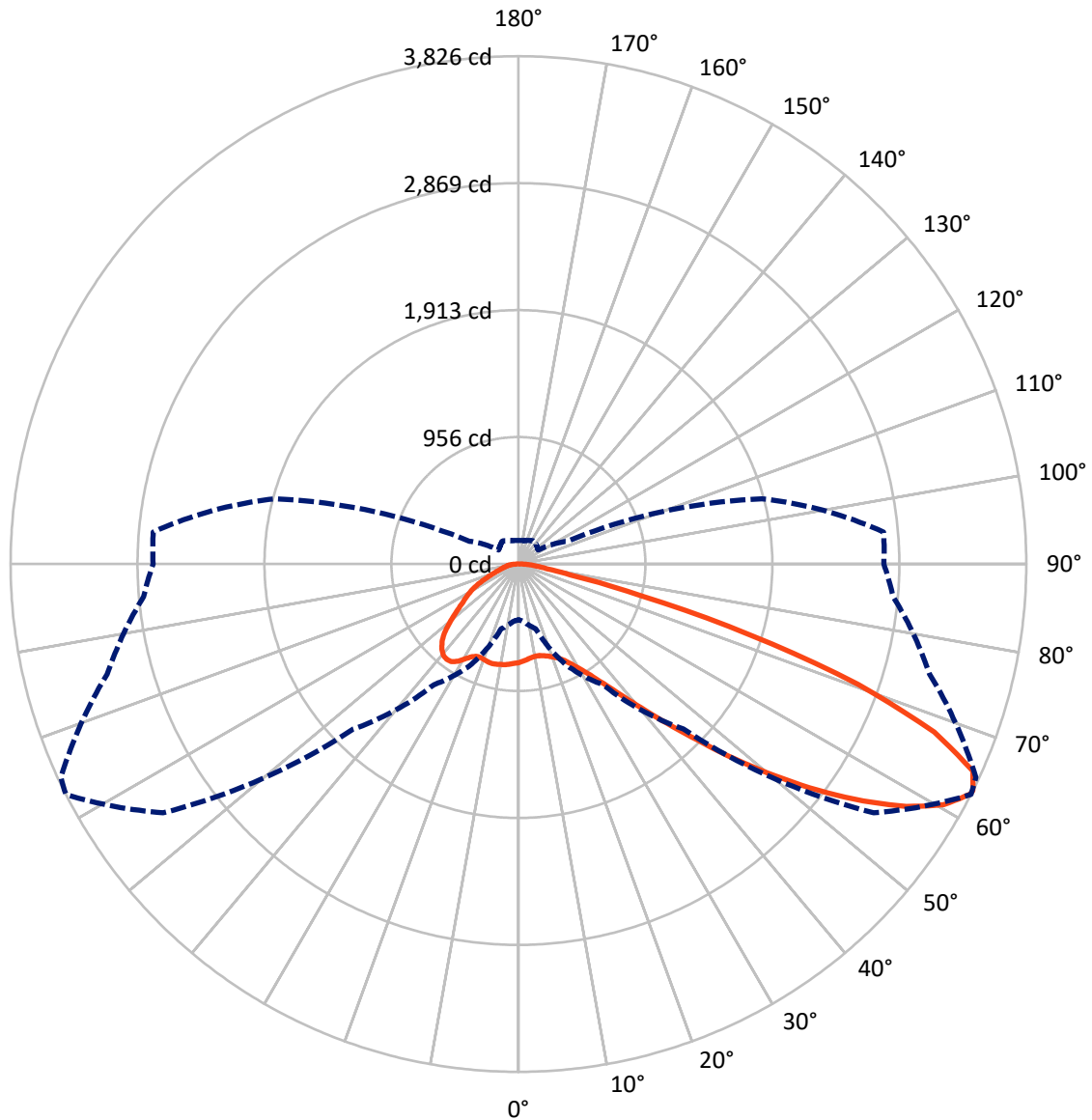
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.8 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	1619.3	0.0	1619.3
	% Fixture	28.5	0.0	28.5
Street Side	Lumens	4052.7	0.0	4052.7
	% Fixture	71.5	0.0	71.5
Total	Lumens	5672.0	0.0	5672.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	1.2
10°-20°	207.9	3.7
20°-30°	365.1	6.4
30°-40°	615.5	10.9
40°-50°	1078.1	19.0
50°-60°	1393.5	24.6
60°-70°	1206.2	21.3
70°-80°	626.2	11.0
80°-90°	109.1	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°	5672.0	100.0
0°-180°	5672.0	100.0



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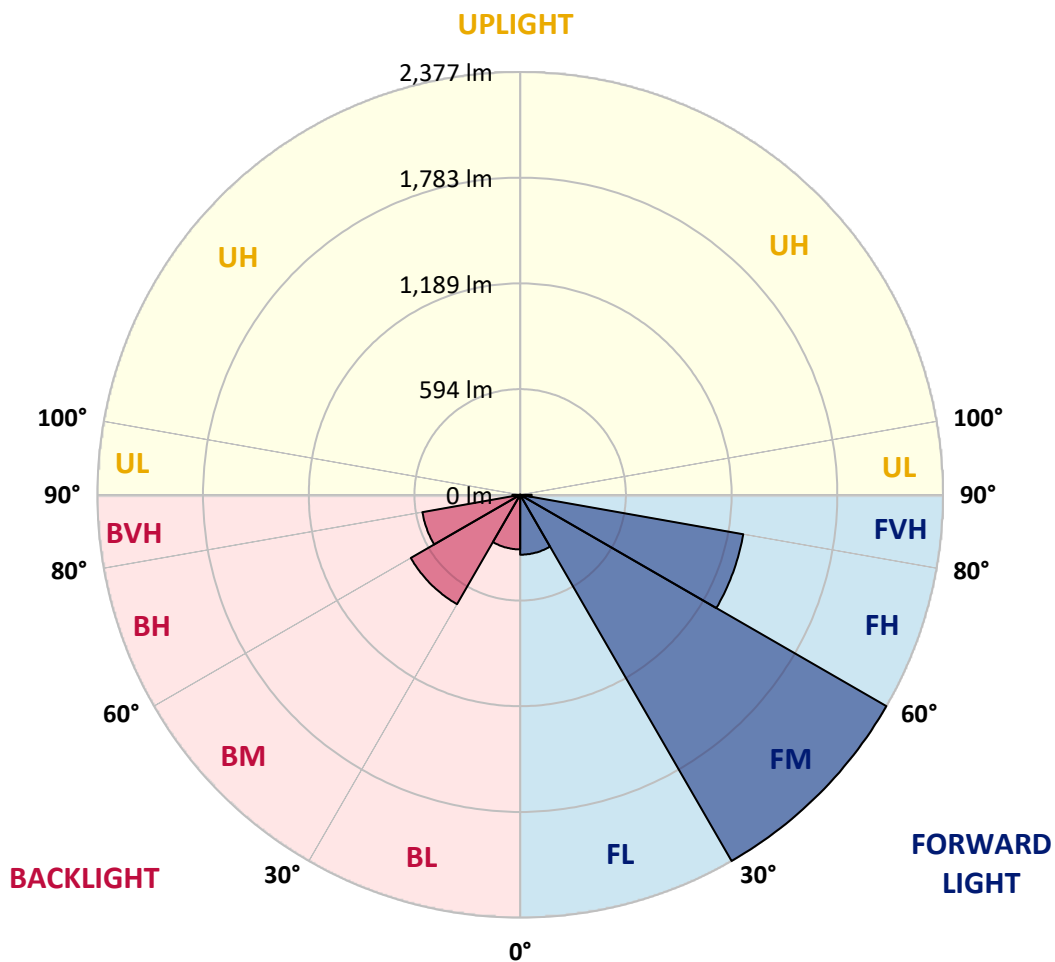
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	336.7	5.9			
FM	(30°-60°)	2377.2	41.9			
FH	(60°-80°)	1273.8	22.5			G1/1800
FVH	(80°-90°)	65.0	1.1			G1/100
BL	(0°-30°)	306.7	5.4	B1/500		
BM	(30°-60°)	709.8	12.5	B1/1000		
BH	(60°-80°)	558.6	9.8	B2/1000		G2/1000
BVH	(80°-90°)	44.1	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°	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6
2.5°	725.1	723.0	726.7	728.3	727.8	731.0	731.0	731.5	731.5	734.1	736.8
5°	703.9	702.8	706.5	709.2	711.3	716.1	719.3	720.9	722.5	726.2	732.5
7.5°	683.7	682.1	687.4	689.5	692.7	699.6	707.1	711.3	713.4	721.4	730.4
10°	667.3	666.7	671.0	673.1	676.8	686.9	697.5	706.5	708.1	718.7	727.2
12.5°	659.3	658.2	663.0	665.7	672.0	684.2	696.4	707.6	710.3	722.5	729.9
15°	665.7	666.7	671.0	671.5	678.9	691.7	705.5	716.6	719.3	731.5	736.8
17.5°	695.9	695.4	698.0	697.0	699.6	706.0	720.9	729.9	733.1	742.1	746.3
20°	750.6	749.0	751.1	744.2	732.5	729.4	738.4	748.5	749.5	754.8	752.2
22.5°	833.9	835.5	830.7	813.2	785.1	771.8	766.0	769.2	772.9	772.4	764.4
25°	942.8	948.1	939.0	908.2	861.0	830.2	809.0	804.2	806.9	799.4	787.2
27.5°	1085.5	1089.8	1070.2	1022.4	958.7	913.0	870.6	854.1	854.1	838.2	815.9
30°	1242.7	1245.3	1214.0	1153.5	1079.7	1011.8	949.1	917.3	914.6	883.3	848.3
32.5°	1433.8	1426.3	1389.2	1314.3	1221.4	1128.0	1047.3	999.0	993.7	946.5	901.9
35°	1680.6	1680.6	1603.6	1518.2	1405.1	1286.2	1180.0	1105.2	1099.9	1046.3	988.4
37.5°	1948.7	1947.6	1878.1	1760.2	1624.9	1479.4	1337.7	1244.3	1232.1	1174.7	1110.0
40°	2215.7	2206.7	2150.4	2038.4	1894.0	1727.9	1532.5	1423.7	1417.8	1336.1	1254.9
42.5°	2411.0	2402.5	2376.0	2301.1	2206.1	2086.2	1785.7	1638.7	1630.2	1527.2	1427.9
45°	2518.8	2506.6	2502.9	2503.9	2514.5	2514.0	2098.4	1892.9	1863.2	1743.8	1611.6
47.5°	2494.4	2465.7	2503.9	2602.1	2767.2	2875.5	2462.5	2195.0	2139.8	1968.8	1807.5
50°	2297.4	2283.6	2365.4	2565.5	2904.7	3159.0	2863.3	2508.7	2430.7	2181.7	1992.7
52.5°	1951.9	1978.4	2079.3	2363.8	2879.8	3330.4	3227.4	2834.6	2726.3	2384.5	2153.6
55°	1553.7	1587.2	1729.4	2031.0	2648.8	3332.5	3490.2	3150.5	3053.9	2594.2	2318.1
57.5°	1130.7	1177.9	1355.7	1632.3	2243.8	3104.8	3619.7	3446.1	3335.7	2800.7	2479.0
60°	710.3	743.7	937.4	1258.1	1715.1	2602.1	3587.3	3682.9	3591.6	2995.5	2662.6
62.5°	457.6	473.5	557.4	898.2	1196.0	1908.3	3347.9	3818.8	3779.5	3173.3	2801.2
63°	419.4	433.2	504.8	830.2	1108.9	1758.1	3267.3	3825.7	3802.3	3206.7	2833.6
65°	299.9	314.8	351.9	570.6	818.5	1179.5	2799.6	3761.5	3787.5	3262.5	2877.6
67.5°	236.8	241.5	258.5	346.6	580.7	669.9	1883.9	3377.7	3491.8	3203.0	2812.3
70°	211.8	215.5	234.6	265.9	439.5	434.2	982.6	2715.7	2951.9	3000.2	2647.8
72.5°	184.7	187.4	210.7	250.6	335.5	331.8	427.3	1826.1	2113.2	2628.7	2420.1
75°	152.9	155.5	175.2	222.4	284.0	262.2	267.5	954.4	1211.4	2060.7	2122.3
77.5°	125.8	127.4	143.9	178.9	250.0	202.2	207.0	401.3	588.7	1404.6	1675.8
80°	91.3	91.8	107.2	135.9	191.1	182.6	153.9	218.7	267.0	769.7	1054.2
82.5°	63.7	64.2	80.2	95.0	131.6	182.1	112.0	146.5	160.3	354.6	469.3
85°	44.6	43.5	54.7	62.6	83.3	110.4	85.5	94.0	99.3	153.4	126.3
87.5°	19.6	19.1	30.8	33.4	41.9	51.0	67.9	49.4	52.6	74.3	39.8
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°	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6	742.6
2.5°	737.3	739.4	742.6	747.4	751.1	752.7	755.9	756.4	761.2	757.0	757.5
5°	736.3	738.9	745.8	754.3	760.1	764.4	772.4	775.0	779.8	777.7	777.1
7.5°	734.7	739.4	749.5	761.7	770.8	777.7	785.1	789.9	794.7	793.6	792.5
10°	732.5	738.4	752.7	764.9	777.7	785.1	790.4	790.9	792.5	791.5	788.8
12.5°	734.1	740.5	757.0	769.2	782.4	787.8	786.2	778.2	771.3	765.5	764.4
15°	739.4	746.9	762.3	773.4	784.0	780.9	771.3	753.8	741.0	733.6	734.1
17.5°	744.8	751.1	762.8	771.8	777.1	767.6	752.7	737.9	732.0	726.2	725.1
20°	749.5	750.6	758.0	766.0	765.5	758.0	744.2	726.2	714.5	704.9	705.5
22.5°	757.0	752.7	753.2	758.0	763.9	757.0	724.6	693.3	675.7	664.6	664.1
25°	773.9	764.9	756.4	759.1	781.4	737.3	682.6	641.8	626.4	616.3	617.4
27.5°	797.3	785.1	768.1	782.4	794.7	698.6	622.7	580.7	570.1	559.5	562.1
30°	822.8	805.3	784.6	832.9	779.8	637.0	548.3	510.1	500.6	490.5	492.6
32.5°	868.4	842.4	815.4	893.4	745.3	562.1	470.3	435.8	429.4	423.1	423.6
35°	944.3	913.6	884.4	939.6	700.7	484.1	400.2	375.8	370.5	363.1	363.1
37.5°	1056.4	1008.0	992.7	964.0	639.6	411.4	348.8	332.3	321.2	311.1	311.1
40°	1186.4	1129.1	1116.9	971.4	560.0	350.9	312.7	298.3	283.5	268.6	269.7
42.5°	1344.6	1267.1	1239.0	961.3	463.4	312.1	287.2	270.7	256.4	243.7	241.5
45°	1523.0	1424.7	1353.6	932.1	375.8	288.2	270.7	251.1	233.0	221.9	219.8
47.5°	1705.0	1595.7	1455.0	873.7	314.3	271.3	259.6	232.0	219.2	211.8	210.7
50°	1879.1	1765.0	1538.9	781.9	278.7	259.0	243.1	222.9	212.3	206.0	205.4
52.5°	2033.6	1925.9	1609.5	686.9	254.8	249.0	235.7	218.7	207.6	201.7	200.7
55°	2180.6	2088.8	1679.5	602.0	234.1	232.0	232.0	214.5	202.2	196.9	195.9
57.5°	2342.0	2274.1	1750.1	539.9	215.5	219.8	227.2	209.7	196.4	191.6	191.1
60°	2528.3	2488.5	1824.5	485.2	199.1	206.5	220.3	203.3	189.5	185.8	184.7
62.5°	2718.9	2720.0	1888.7	419.4	185.3	196.4	212.3	197.5	183.1	180.5	180.0
63°	2752.4	2761.9	1897.7	405.0	182.1	194.3	210.2	195.3	181.5	178.9	178.4
65°	2834.6	2876.6	1905.1	344.5	170.4	186.3	202.2	188.4	174.6	174.1	173.1
67.5°	2815.0	2883.5	1859.0	270.2	157.1	175.2	191.1	178.4	166.1	166.1	164.0
70°	2668.5	2713.1	1717.2	208.6	147.0	163.5	177.8	167.7	155.0	156.1	151.8
72.5°	2443.9	2395.1	1412.5	163.0	134.8	150.2	162.4	153.9	142.8	141.7	137.0
75°	2114.8	1954.0	1011.8	131.6	120.0	132.7	145.4	139.1	129.0	123.2	122.1
77.5°	1611.6	1387.1	606.2	111.5	107.2	117.8	125.8	121.0	113.1	106.2	106.7
80°	959.7	800.0	273.4	94.5	92.9	100.9	107.2	103.5	98.2	89.7	87.6
82.5°	388.6	309.5	122.6	76.4	78.6	84.4	90.2	87.1	82.8	80.7	68.5
85°	100.9	97.1	71.7	57.3	60.5	63.2	71.1	71.1	67.4	55.2	51.0
87.5°	28.7	38.2	39.8	36.1	40.9	41.4	49.4	49.4	50.4	34.0	30.8
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)