

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: P214577

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T2R-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6766 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

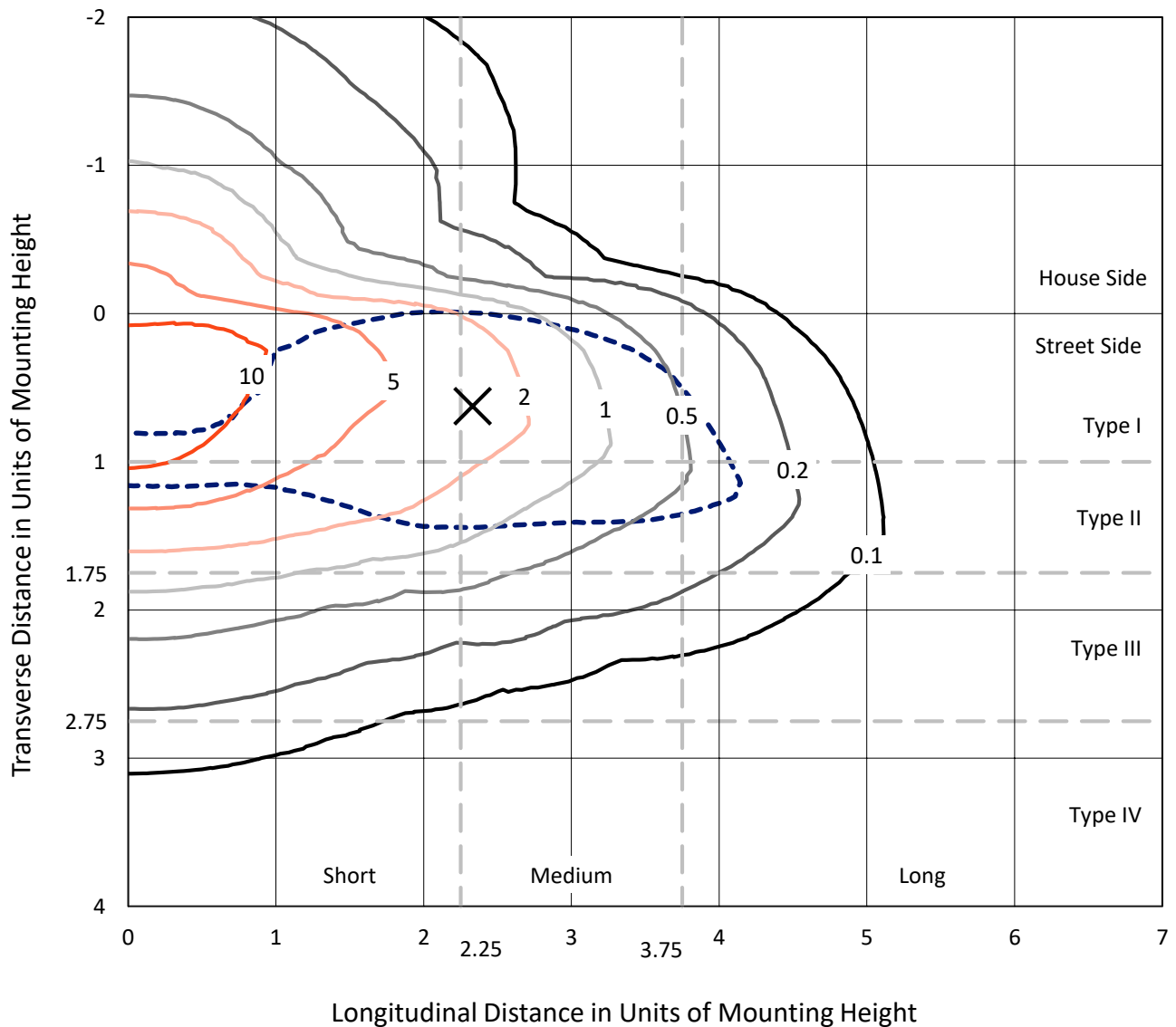
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

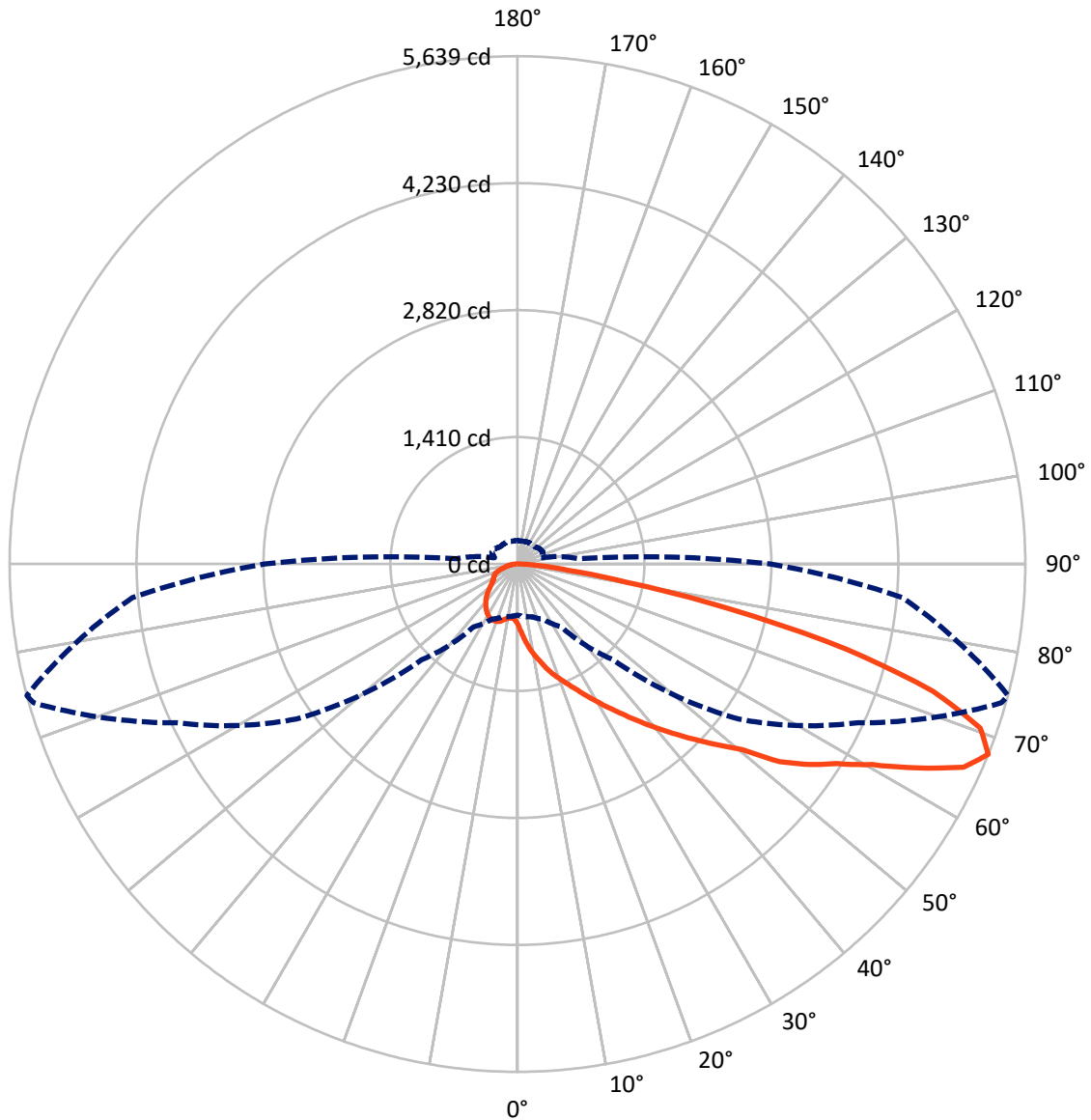
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1155.4	0.0	1155.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	5610.6	0.0	5610.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	6766.0	0.0	6766.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	1.2
10°-20°	284.6	4.2
20°-30°	519.2	7.7
30°-40°	852.2	12.6
40°-50°	1232.3	18.2
50°-60°	1452.3	21.5
60°-70°	1411.3	20.9
70°-80°	784.5	11.6
80°-90°	150.8	2.2
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°	6766.0	100.0
0°-180°	6766.0	100.0



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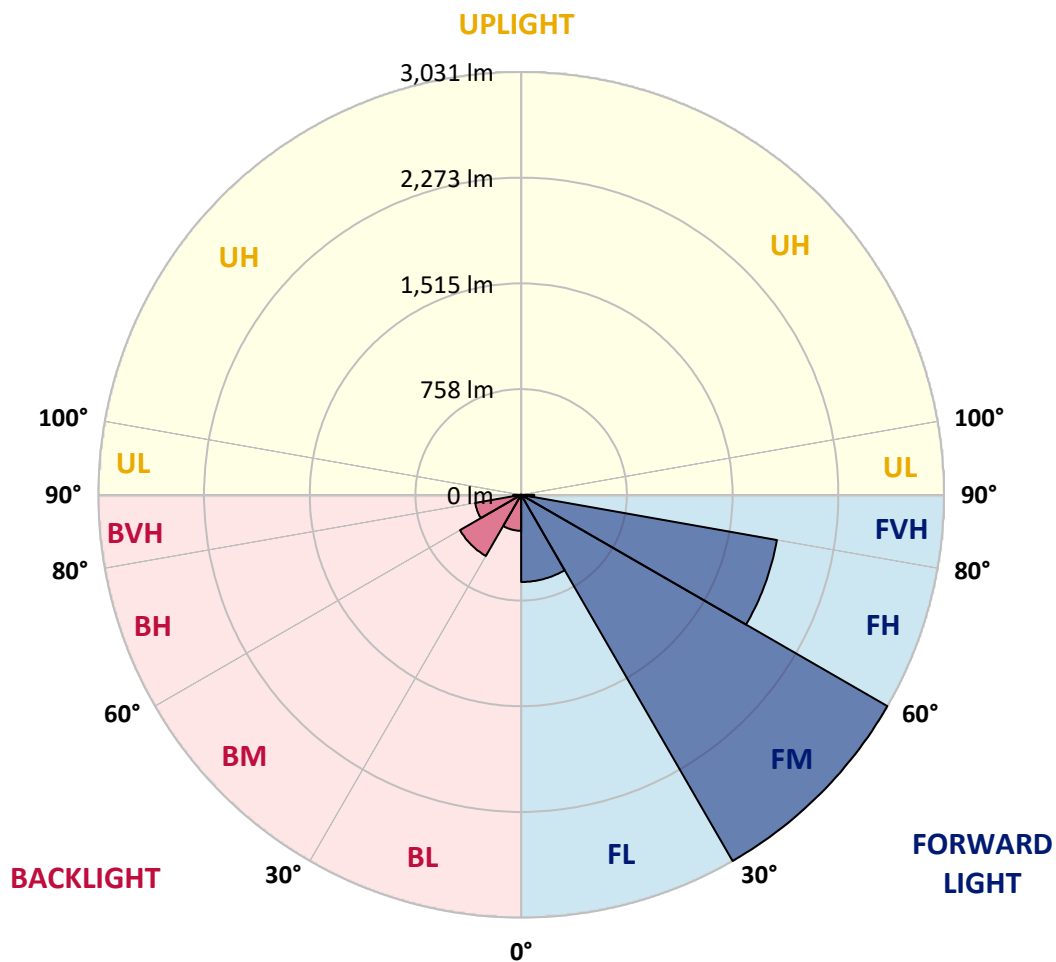
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	624.7	9.2			
FM (30°-60°)	3030.8	44.8			
FH (60°-80°)	1861.2	27.5			G2/5000
FVH (80°-90°)	93.9	1.4			G1/100
BL (0°-30°)	257.9	3.8	B1/500		
BM (30°-60°)	506.0	7.5	B1/1000		
BH (60°-80°)	334.5	4.9	B1/500		G1/500
BVH (80°-90°)	57.0	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-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4
2.5°	950.5	953.3	947.7	934.9	916.6	882.6	852.9	800.6	753.9	748.2	698.7
5°	1117.4	1120.2	1113.2	1097.6	1077.8	1041.0	1000.0	932.1	857.2	843.0	738.3
7.5°	1232.0	1233.4	1224.9	1209.3	1193.8	1157.0	1116.0	1039.6	947.7	936.4	789.3
10°	1329.6	1332.4	1321.1	1311.2	1294.2	1257.4	1215.0	1134.4	1039.6	1024.1	841.6
12.5°	1420.1	1422.9	1415.9	1407.4	1401.7	1367.8	1321.1	1224.9	1123.1	1106.1	903.8
15°	1480.9	1483.7	1485.2	1496.5	1503.5	1479.5	1432.8	1328.2	1213.6	1198.0	977.4
17.5°	1463.9	1471.0	1492.2	1533.3	1577.1	1578.5	1540.3	1430.0	1302.7	1285.7	1052.3
20°	1414.4	1420.1	1445.6	1507.8	1594.1	1643.6	1640.7	1533.3	1386.2	1367.8	1121.7
22.5°	1455.5	1462.5	1462.5	1500.7	1585.6	1677.5	1714.3	1635.1	1469.6	1452.6	1191.0
25°	1630.8	1635.1	1605.4	1589.8	1620.9	1705.8	1775.1	1745.4	1571.4	1551.6	1265.9
27.5°	1875.5	1868.5	1831.7	1769.5	1735.5	1758.1	1828.9	1850.1	1688.8	1664.8	1343.7
30°	2118.8	2114.6	2072.2	1988.7	1912.3	1864.2	1888.3	1943.4	1816.1	1787.9	1418.7
32.5°	2346.6	2339.5	2292.8	2195.2	2108.9	2019.8	1973.1	2028.3	1951.9	1919.4	1502.1
35°	2555.9	2537.5	2490.8	2389.0	2299.9	2215.0	2100.4	2108.9	2099.0	2065.1	1594.1
37.5°	2725.6	2711.5	2660.6	2565.8	2471.0	2390.4	2270.2	2200.9	2257.4	2224.9	1700.2
40°	2875.6	2860.0	2807.7	2712.9	2625.2	2548.8	2454.1	2312.6	2435.7	2398.9	1819.0
42.5°	2988.7	2977.4	2935.0	2841.6	2756.7	2687.4	2640.8	2454.1	2621.0	2585.6	1949.1
45°	3049.5	3038.2	3015.6	2940.6	2862.8	2809.1	2813.3	2622.4	2814.7	2785.0	2103.3
47.5°	2974.6	2983.1	3002.9	2988.7	2940.6	2915.2	2967.5	2796.3	3031.1	3002.9	2270.2
50°	2773.7	2782.2	2861.4	2959.0	2976.0	3007.1	3106.1	2997.2	3260.3	3237.7	2476.7
52.5°	2280.1	2326.8	2546.0	2779.4	2939.2	3067.9	3260.3	3295.6	3646.4	3646.4	2841.6
55°	1722.8	1763.8	2014.2	2421.5	2796.3	3073.6	3373.4	3497.9	3925.1	3930.7	3032.6
57.5°	1396.1	1421.5	1544.6	1961.8	2496.5	3002.9	3507.8	3671.9	4157.0	4182.5	3278.7
60°	1133.0	1147.1	1227.7	1517.7	2082.1	2811.9	3604.0	3920.8	4488.0	4523.4	3592.7
62.5°	910.9	925.0	978.8	1152.8	1633.7	2454.1	3587.0	4179.7	4929.3	4987.3	4004.3
65°	727.0	742.6	777.9	885.4	1210.8	2009.9	3413.0	4312.6	5386.2	5442.8	4277.3
67.5°	567.2	581.3	605.4	676.1	852.9	1503.5	3001.4	4172.6	5591.3	5639.4	4291.4
70°	428.6	435.6	455.4	500.7	609.6	998.6	2349.4	3703.0	5407.4	5451.2	4008.5
72.5°	332.4	331.0	342.3	364.9	425.7	687.4	1557.3	3011.3	4780.8	4826.1	3420.1
75°	271.6	270.2	277.2	284.3	308.3	461.1	919.4	2267.3	3858.6	3772.3	2565.8
77.5°	229.1	227.7	234.8	236.2	246.1	318.2	523.3	1492.2	2574.3	2425.8	1445.6
80°	193.8	192.4	200.9	203.7	210.8	233.4	301.3	807.6	1292.8	1224.9	690.2
82.5°	145.7	151.3	166.9	174.0	182.5	172.6	186.7	356.4	599.7	572.8	299.9
85°	70.7	83.5	125.9	140.0	149.9	108.9	127.3	168.3	270.2	257.4	121.6
87.5°	24.0	21.2	75.0	89.1	97.6	49.5	70.7	93.4	111.7	101.8	38.2
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°	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4
2.5°	677.5	656.3	625.2	601.1	585.6	572.8	567.2	565.8	562.9	561.5	561.5
5°	691.7	653.5	605.4	579.9	572.8	567.2	570.0	571.4	571.4	571.4	571.4
7.5°	712.9	659.1	601.1	584.2	582.7	582.7	591.2	595.5	598.3	598.3	598.3
10°	741.2	669.0	608.2	594.1	598.3	601.1	611.0	616.7	619.5	620.9	622.4
12.5°	779.4	690.2	622.4	611.0	616.7	618.1	625.2	628.0	630.8	632.3	632.3
15°	830.3	721.4	645.0	630.8	632.3	630.8	630.8	628.0	626.6	626.6	629.4
17.5°	882.6	751.1	664.8	645.0	639.3	628.0	619.5	612.5	608.2	605.4	606.8
20°	934.9	777.9	676.1	647.8	632.3	613.9	598.3	588.4	582.7	577.1	579.9
22.5°	987.3	803.4	680.3	639.3	616.7	589.8	572.8	557.3	544.6	536.1	537.5
25°	1045.3	831.7	680.3	629.4	595.5	567.2	546.0	520.5	502.1	495.1	497.9
27.5°	1103.3	855.7	673.3	611.0	571.4	543.1	512.0	482.3	471.0	466.8	468.2
30°	1161.3	874.1	657.7	588.4	546.0	514.9	473.8	454.0	439.9	428.6	430.0
32.5°	1219.2	886.9	636.5	560.1	519.1	479.5	445.5	422.9	397.5	383.3	384.7
35°	1285.7	896.8	611.0	531.8	489.4	448.4	422.9	386.1	359.3	348.0	345.1
37.5°	1355.0	903.8	584.2	500.7	459.7	425.7	400.3	355.0	329.6	314.0	312.6
40°	1430.0	906.7	551.6	468.2	431.4	411.6	370.6	336.6	292.8	282.9	282.9
42.5°	1519.1	905.2	519.1	435.6	400.3	379.1	349.4	333.8	295.6	285.7	280.1
45°	1620.9	905.2	483.7	397.5	369.2	338.1	325.3	315.4	290.0	294.2	297.0
47.5°	1736.9	902.4	441.3	366.3	343.7	316.8	309.8	288.5	278.6	281.5	284.3
50°	1896.8	906.7	403.1	340.9	325.3	302.7	294.2	282.9	278.6	280.1	278.6
52.5°	2118.8	892.5	366.3	325.3	311.2	281.5	281.5	280.1	281.5	280.1	280.1
55°	2240.5	861.4	339.5	316.8	301.3	271.6	277.2	280.1	282.9	281.5	281.5
57.5°	2413.0	840.2	318.2	311.2	295.6	268.7	274.4	280.1	281.5	280.1	280.1
60°	2616.7	826.0	304.1	312.6	291.4	268.7	275.8	280.1	278.6	277.2	277.2
62.5°	2852.9	820.4	294.2	316.8	287.1	270.2	275.8	280.1	274.4	273.0	273.0
65°	2942.0	769.5	281.5	319.7	290.0	270.2	274.4	275.8	268.7	267.3	265.9
67.5°	2804.8	681.8	263.1	314.0	298.4	270.2	270.2	268.7	260.3	258.8	256.0
70°	2497.9	565.8	234.8	295.6	304.1	271.6	264.5	257.4	248.9	248.9	243.3
72.5°	2045.3	445.5	198.0	263.1	299.9	275.8	253.2	243.3	233.4	233.4	227.7
75°	1473.8	332.4	158.4	219.2	281.5	274.4	239.0	226.3	215.0	213.6	206.5
77.5°	840.2	233.4	128.7	171.1	250.4	267.3	226.3	206.5	193.8	189.5	185.3
80°	431.4	157.0	104.7	134.4	207.9	247.5	216.4	183.9	169.7	162.7	155.6
82.5°	205.1	104.7	80.6	99.0	157.0	216.4	203.7	158.4	142.9	134.4	125.9
85°	91.9	62.2	53.7	63.6	111.7	168.3	179.6	130.1	111.7	140.0	103.3
87.5°	29.7	28.3	28.3	29.7	53.7	73.6	131.5	96.2	89.1	73.6	62.2
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)