

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: P214572

Luminaire Tested: **ARCH-AF16-60-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214572
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-AF16-60-D-U-T2R-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6523.9 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 - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

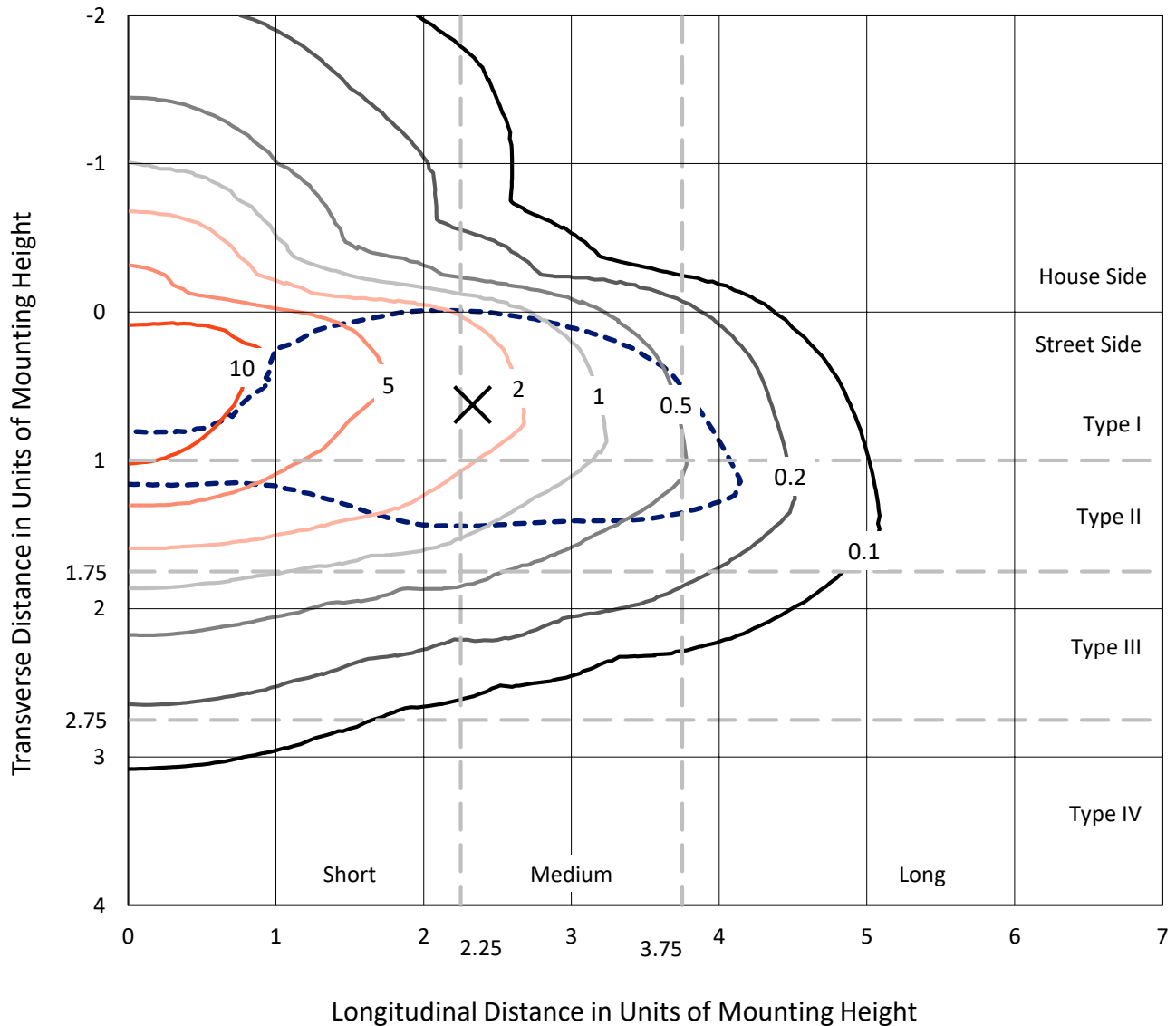
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

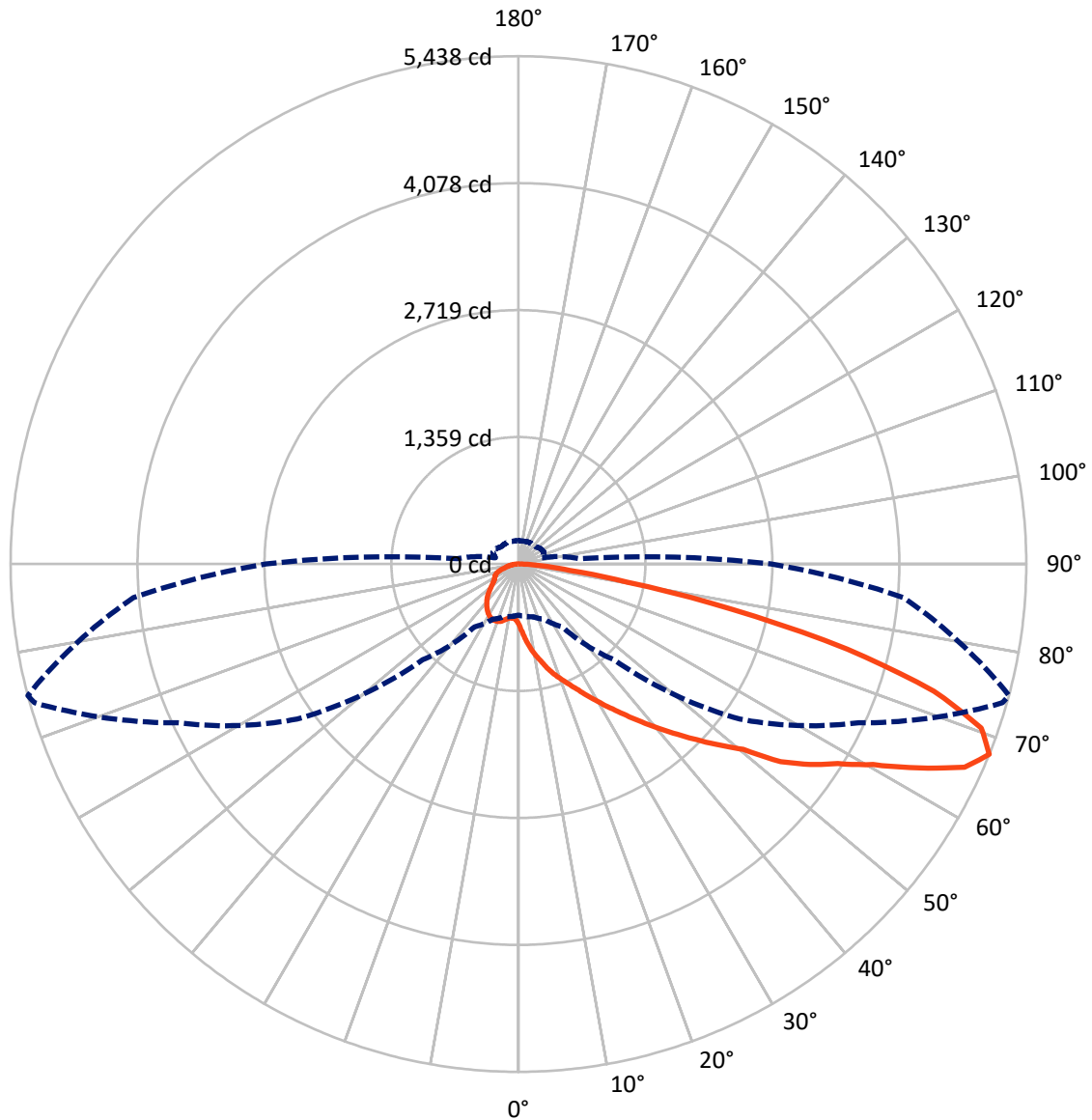
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.5 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	1114.0	0.0	1114.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	5409.8	0.0	5409.8
	% Fixture	82.9	0.0	82.9
Total	Lumens	6523.9	0.0	6523.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	1.2
10°-20°	274.5	4.2
20°-30°	500.6	7.7
30°-40°	821.7	12.6
40°-50°	1188.2	18.2
50°-60°	1400.3	21.5
60°-70°	1360.8	20.9
70°-80°	756.4	11.6
80°-90°	145.4	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°	6523.9	100.0
0°-180°	6523.9	100.0

Coefficient of Utilization



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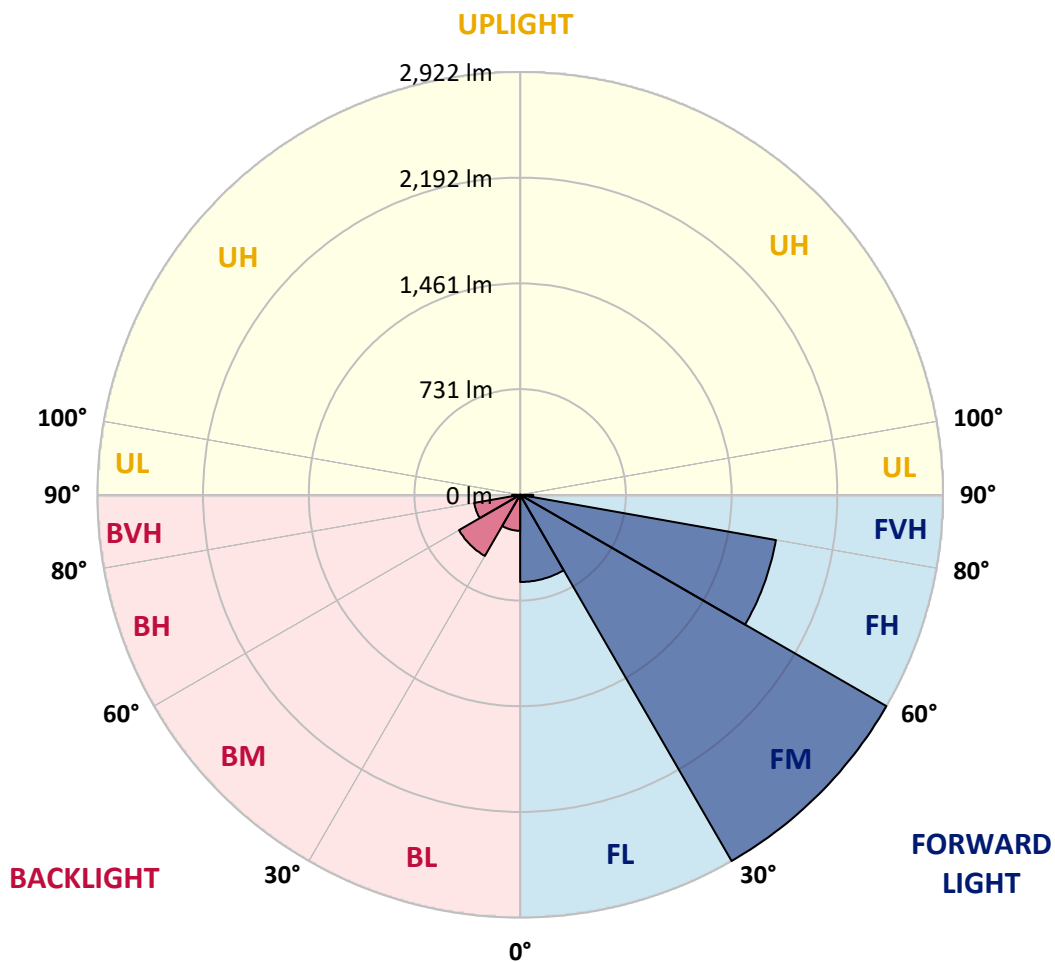
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	602.3	9.2			
FM (30°-60°)	2922.3	44.8			
FH (60°-80°)	1794.6	27.5			G1/1800
FVH (80°-90°)	90.5	1.4			G1/100
BL (0°-30°)	248.7	3.8	B1/500		
BM (30°-60°)	487.9	7.5	B1/1000		
BH (60°-80°)	322.6	4.9	B1/500		G1/500
BVH (80°-90°)	54.9	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5
2.5°	916.4	919.2	913.7	901.5	883.8	851.0	822.4	771.9	726.9	721.4	673.7
5°	1077.4	1080.1	1073.4	1058.2	1039.3	1003.8	964.2	898.7	826.4	812.9	712.0
7.5°	1187.8	1189.3	1181.1	1166.1	1151.0	1115.6	1076.1	1002.5	913.7	902.8	761.0
10°	1281.9	1284.7	1273.9	1264.2	1247.8	1212.4	1171.5	1093.8	1002.5	987.3	811.5
12.5°	1369.2	1372.0	1365.2	1357.0	1351.5	1318.9	1273.9	1181.1	1082.9	1066.5	871.5
15°	1427.9	1430.6	1432.1	1442.9	1449.8	1426.6	1381.6	1280.6	1170.1	1155.2	942.4
17.5°	1411.5	1418.4	1438.8	1478.4	1520.7	1522.0	1485.2	1378.9	1256.1	1239.8	1014.7
20°	1363.8	1369.2	1393.8	1453.8	1537.1	1584.8	1582.1	1478.4	1336.6	1318.9	1081.5
22.5°	1403.3	1410.2	1410.2	1447.0	1528.9	1617.5	1653.0	1576.6	1417.0	1400.6	1148.4
25°	1572.5	1576.6	1547.9	1532.9	1563.0	1644.8	1711.5	1682.9	1515.2	1496.1	1220.7
27.5°	1808.5	1801.5	1766.1	1706.2	1673.5	1695.2	1763.5	1783.8	1628.4	1605.2	1295.6
30°	2043.0	2038.9	1998.1	1917.5	1843.9	1797.6	1820.7	1873.9	1751.1	1723.9	1367.9
32.5°	2262.5	2255.7	2210.8	2116.7	2033.5	1947.5	1902.5	1955.7	1882.1	1850.8	1448.3
35°	2464.5	2446.7	2401.7	2303.5	2217.5	2135.7	2025.2	2033.5	2023.9	1991.1	1537.1
37.5°	2628.1	2614.5	2565.3	2473.9	2382.6	2304.9	2188.9	2122.2	2176.7	2145.3	1639.3
40°	2772.7	2757.6	2707.2	2615.7	2531.2	2457.6	2366.2	2229.9	2348.5	2313.0	1753.8
42.5°	2881.7	2870.9	2830.0	2739.9	2658.1	2591.3	2546.3	2366.2	2527.1	2493.1	1879.4
45°	2940.3	2929.5	2907.7	2835.4	2760.3	2708.5	2712.7	2528.5	2714.0	2685.4	2028.0
47.5°	2868.2	2876.2	2895.4	2881.7	2835.4	2810.8	2861.3	2696.3	2922.6	2895.4	2188.9
50°	2674.4	2682.7	2759.1	2853.1	2869.4	2899.5	2994.9	2889.9	3143.6	3121.7	2388.1
52.5°	2198.6	2243.5	2454.8	2679.9	2834.0	2958.0	3143.6	3177.7	3516.0	3516.0	2739.9
55°	1661.2	1700.7	1942.1	2334.9	2696.3	2963.5	3252.7	3372.8	3784.6	3790.1	2924.0
57.5°	1346.1	1370.6	1489.3	1891.6	2407.2	2895.4	3382.2	3540.4	4008.2	4032.9	3161.3
60°	1092.4	1106.0	1183.9	1463.4	2007.5	2711.3	3475.0	3780.5	4327.4	4361.5	3464.1
62.5°	878.3	892.0	943.8	1111.5	1575.2	2366.2	3458.6	4030.1	4752.9	4808.8	3861.0
65°	701.0	715.9	750.1	853.8	1167.4	1938.0	3290.9	4158.3	5193.4	5247.9	4124.2
67.5°	546.9	560.5	583.7	651.9	822.4	1449.8	2894.1	4023.3	5391.2	5437.5	4137.8
70°	413.2	420.1	439.1	482.8	587.9	962.9	2265.3	3570.5	5213.9	5256.1	3865.0
72.5°	320.4	319.1	330.1	351.9	410.5	662.7	1501.5	2903.6	4609.7	4653.4	3297.8
75°	261.9	260.5	267.3	274.1	297.3	444.5	886.5	2186.2	3720.5	3637.3	2473.9
77.5°	220.9	219.6	226.3	227.8	237.3	306.9	504.7	1438.8	2482.2	2338.9	1393.8
80°	186.9	185.5	193.7	196.3	203.2	225.1	290.5	778.7	1246.5	1181.1	665.5
82.5°	140.5	146.0	160.9	167.7	175.9	166.4	180.1	343.7	578.3	552.3	289.1
85°	68.2	80.5	121.4	135.1	144.5	105.0	122.7	162.2	260.5	248.2	117.2
87.5°	23.2	20.4	72.3	85.9	94.1	47.7	68.2	90.0	107.7	98.3	36.8
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°	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5
2.5°	653.3	632.8	602.8	579.6	564.7	552.3	546.9	545.5	542.8	541.5	541.5
5°	666.9	630.1	583.7	559.2	552.3	546.9	549.6	551.0	551.0	551.0	551.0
7.5°	687.4	635.6	579.6	563.2	561.9	561.9	570.2	574.1	576.9	576.9	576.9
10°	714.7	645.0	586.4	572.8	576.9	579.6	589.1	594.6	597.3	598.7	600.1
12.5°	751.4	665.5	600.1	589.1	594.6	596.0	602.8	605.6	608.2	609.6	609.6
15°	800.6	695.6	621.9	608.2	609.6	608.2	608.2	605.6	604.2	604.2	606.9
17.5°	851.0	724.2	641.1	621.9	616.4	605.6	597.3	590.5	586.4	583.7	585.1
20°	901.5	750.1	651.9	624.6	609.6	591.8	576.9	567.4	561.9	556.4	559.2
22.5°	951.9	774.6	656.0	616.4	594.6	568.7	552.3	537.3	525.1	516.9	518.2
25°	1007.9	802.0	656.0	606.9	574.1	546.9	526.4	501.9	484.1	477.4	480.0
27.5°	1063.7	825.1	649.2	589.1	551.0	523.7	493.8	465.1	454.2	450.0	451.5
30°	1119.7	842.8	634.1	567.4	526.4	496.5	456.9	437.8	424.2	413.2	414.6
32.5°	1175.6	855.1	613.7	540.1	500.5	462.3	429.6	407.7	383.3	369.7	370.9
35°	1239.8	864.7	589.1	512.8	471.9	432.3	407.7	372.3	346.5	335.5	332.8
37.5°	1306.5	871.5	563.2	482.8	443.3	410.5	386.0	342.3	317.7	302.7	301.4
40°	1378.9	874.2	531.9	451.5	415.9	396.8	357.3	324.6	282.3	272.7	272.7
42.5°	1464.7	872.9	500.5	420.1	386.0	365.5	336.8	321.9	285.0	275.5	270.1
45°	1563.0	872.9	466.4	383.3	355.9	325.9	313.7	304.2	279.6	283.6	286.4
47.5°	1674.7	870.1	425.6	353.2	331.4	305.5	298.8	278.2	268.7	271.4	274.1
50°	1828.9	874.2	388.6	328.7	313.7	291.8	283.6	272.7	268.7	270.1	268.7
52.5°	2043.0	860.5	353.2	313.7	300.0	271.4	271.4	270.1	271.4	270.1	270.1
55°	2160.3	830.6	327.3	305.5	290.5	261.9	267.3	270.1	272.7	271.4	271.4
57.5°	2326.6	810.1	306.9	300.0	285.0	259.2	264.6	270.1	271.4	270.1	270.1
60°	2523.2	796.5	293.3	301.4	280.9	259.2	265.9	270.1	268.7	267.3	267.3
62.5°	2750.8	791.0	283.6	305.5	276.9	260.5	265.9	270.1	264.6	263.2	263.2
65°	2836.7	741.9	271.4	308.2	279.6	260.5	264.6	265.9	259.2	257.8	256.4
67.5°	2704.5	657.4	253.7	302.7	287.8	260.5	260.5	259.2	251.0	249.5	246.8
70°	2408.5	545.5	226.3	285.0	293.3	261.9	255.0	248.2	240.1	240.1	234.6
72.5°	1972.1	429.6	190.9	253.7	289.1	265.9	244.0	234.6	225.1	225.1	219.6
75°	1421.1	320.4	152.8	211.4	271.4	264.6	230.5	218.2	207.3	206.0	199.1
77.5°	810.1	225.1	124.1	165.0	241.4	257.8	218.2	199.1	186.9	182.8	178.6
80°	415.9	151.5	100.9	129.6	200.5	238.6	208.6	177.3	163.7	156.8	150.0
82.5°	197.8	100.9	77.7	95.5	151.5	208.6	196.3	152.8	137.7	129.6	121.4
85°	88.6	60.0	51.8	61.4	107.7	162.2	173.1	125.4	107.7	135.1	99.5
87.5°	28.6	27.4	27.4	28.6	51.8	70.9	126.8	92.8	85.9	70.9	60.0
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)