

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: P214731

Luminaire Tested: **ARCH-AF24-60-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
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-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7776.5 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

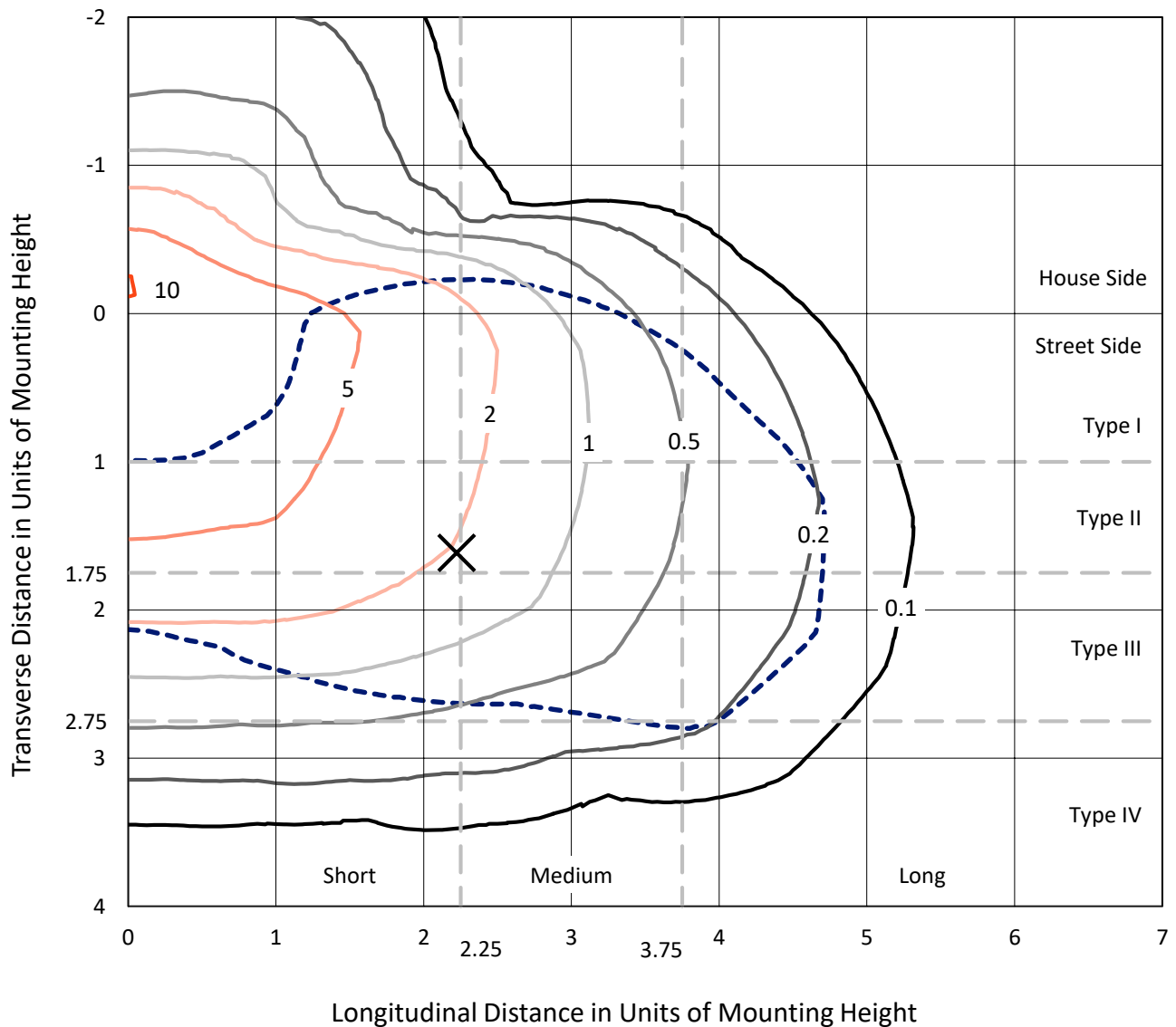
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

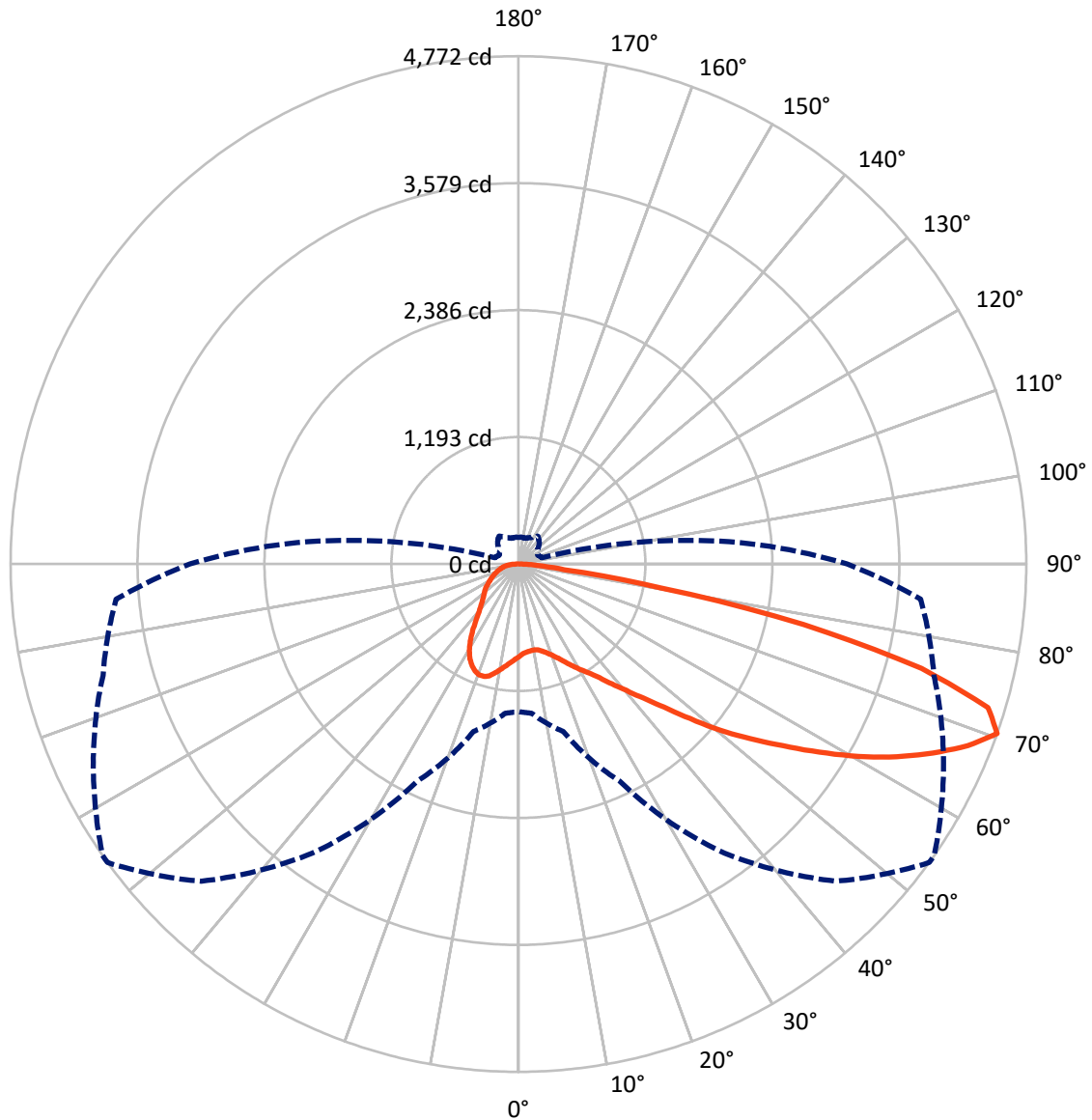


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1763.7	0.0	1763.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6012.8	0.0	6012.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	7776.5	0.0	7776.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	1.1
10°-20°	272.8	3.5
20°-30°	474.0	6.1
30°-40°	692.7	8.9
40°-50°	1087.1	14.0
50°-60°	1671.8	21.5
60°-70°	2042.5	26.3
70°-80°	1266.3	16.3
80°-90°	184.0	2.4
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°	7776.5	100.0
0°-180°	7776.5	100.0



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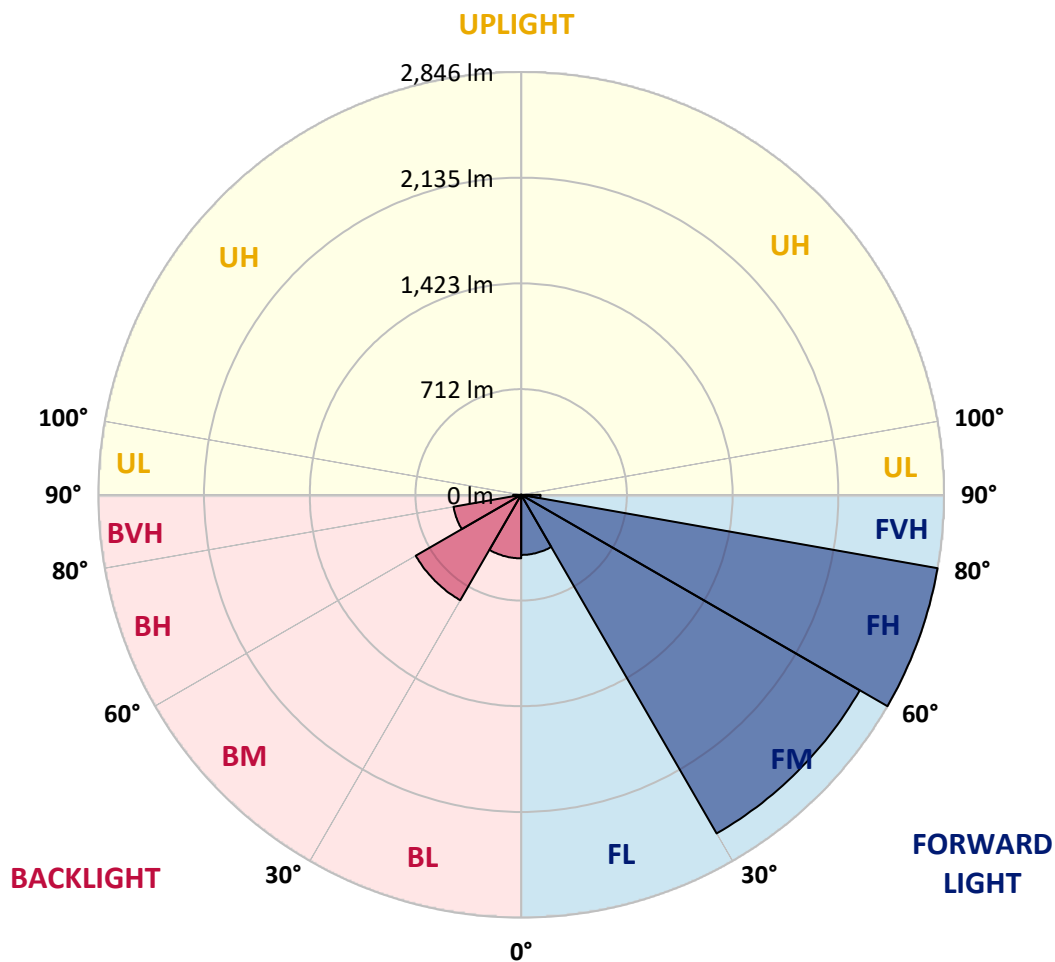
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	404.6	5.2			
FM	(30°-60°)	2632.0	33.8			
FH	(60°-80°)	2846.3	36.6			G2/5000
FVH	(80°-90°)	129.9	1.7			G2/225
BL	(0°-30°)	427.6	5.5	B1/500		
BM	(30°-60°)	819.6	10.5	B1/1000		
BH	(60°-80°)	462.5	5.9	B1/500		G1/500
BVH	(80°-90°)	54.1	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0
2.5°	835.9	833.0	833.0	837.3	838.7	843.0	843.0	844.4	848.6	855.8	864.3
5°	810.2	808.8	810.2	815.9	818.8	827.4	830.1	831.6	840.1	851.5	864.3
7.5°	784.6	783.2	786.0	794.5	803.1	815.9	823.1	824.5	837.3	852.9	870.0
10°	776.0	774.6	778.9	786.0	794.5	808.8	820.2	821.6	840.1	858.7	882.8
12.5°	787.5	786.0	790.3	797.4	806.0	815.9	828.7	830.1	854.4	878.6	904.2
15°	815.9	815.9	817.3	821.6	830.1	838.7	850.1	851.5	877.2	905.6	931.3
17.5°	860.1	857.2	857.2	855.8	861.5	865.7	880.0	881.4	908.5	934.2	959.7
20°	914.2	912.8	907.1	899.9	898.6	901.3	915.6	917.0	944.1	965.5	989.6
22.5°	979.7	981.1	968.3	952.6	945.5	949.8	962.6	964.0	984.0	1002.5	1023.8
25°	1066.5	1062.2	1043.7	1021.0	1006.7	1006.7	1019.6	1019.6	1038.1	1049.4	1063.7
27.5°	1149.1	1140.6	1123.5	1090.8	1068.0	1072.3	1085.0	1085.0	1102.1	1106.4	1113.5
30°	1238.8	1230.3	1208.9	1167.6	1137.7	1134.9	1150.5	1149.1	1171.9	1170.5	1164.8
32.5°	1348.5	1344.2	1308.6	1255.9	1216.1	1206.1	1220.3	1221.7	1236.0	1231.7	1213.2
35°	1502.3	1500.9	1468.0	1375.6	1322.9	1304.4	1312.9	1312.9	1322.9	1311.4	1280.1
37.5°	1696.0	1698.8	1670.3	1533.6	1459.5	1428.2	1429.7	1428.2	1431.1	1418.2	1385.5
40°	1889.6	1896.7	1895.2	1730.1	1636.1	1582.0	1562.0	1559.2	1566.3	1560.6	1529.3
42.5°	2144.4	2161.6	2121.7	1972.1	1866.8	1775.6	1721.5	1714.5	1730.1	1737.2	1707.3
45°	2409.4	2403.6	2340.9	2232.8	2137.4	2020.5	1918.0	1906.7	1918.0	1939.4	1908.1
47.5°	2547.5	2543.2	2527.5	2473.4	2459.2	2325.3	2170.1	2160.2	2138.8	2168.7	2131.6
50°	2775.3	2779.6	2715.4	2709.8	2769.5	2695.6	2454.9	2432.1	2393.6	2417.8	2386.5
52.5°	2940.5	2922.0	2882.1	2931.9	3118.5	3078.6	2722.6	2712.7	2677.1	2671.3	2657.1
55°	3007.4	3007.4	3014.5	3129.8	3396.1	3343.4	3013.1	3023.0	2974.6	2934.7	2953.3
57.5°	3027.3	3035.8	3097.1	3287.9	3722.2	3549.8	3333.5	3347.7	3277.9	3198.2	3256.6
60°	2929.0	2954.7	3101.4	3377.6	3905.8	3769.2	3671.0	3675.2	3574.1	3457.4	3559.9
62.5°	2677.1	2708.4	2970.3	3414.6	3876.0	3994.2	3989.9	3999.8	3861.7	3716.5	3844.7
65°	2368.0	2399.3	2678.4	3310.7	3853.1	4155.0	4281.8	4308.9	4130.9	3935.8	4022.7
67.5°	1913.7	1955.1	2219.9	2960.4	3742.2	4287.5	4555.2	4583.6	4338.7	4049.7	4007.0
70°	1386.9	1406.9	1628.9	2249.9	3289.3	4214.9	4771.7	4770.2	4407.1	4041.2	3793.4
72.5°	667.8	683.5	875.7	1396.8	2352.4	3577.0	4615.0	4642.0	4313.2	3917.3	3304.9
75°	274.9	290.5	354.6	589.5	1234.6	2363.7	3911.6	3975.7	3917.3	3515.7	2585.9
77.5°	170.8	176.6	207.9	304.7	563.9	1103.6	2738.2	2825.1	3104.2	2816.6	1707.3
80°	128.2	132.5	155.2	213.6	356.0	407.2	1359.9	1469.5	1881.0	1616.2	773.2
82.5°	106.8	108.2	123.9	155.2	242.0	233.5	435.8	485.6	877.2	616.5	266.3
85°	99.6	102.5	111.1	111.1	153.7	146.7	180.9	189.3	254.9	210.7	92.6
87.5°	51.2	48.4	98.2	86.8	79.8	71.2	76.9	82.6	95.4	101.1	41.3
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°	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0	870.0
2.5°	867.2	871.5	878.6	885.7	894.3	904.2	909.9	917.0	922.7	919.8	918.4
5°	871.5	878.6	894.3	908.5	925.6	945.5	958.3	972.5	984.0	986.8	982.5
7.5°	878.6	891.4	912.8	938.4	961.2	986.8	1006.7	1026.6	1040.9	1043.7	1043.7
10°	895.7	909.9	938.4	972.5	999.6	1026.6	1049.4	1065.1	1077.9	1083.6	1083.6
12.5°	919.8	936.9	971.1	1012.4	1042.3	1068.0	1080.7	1087.9	1093.6	1099.3	1100.7
15°	948.4	966.9	1008.1	1052.3	1083.6	1096.4	1096.4	1095.0	1095.0	1097.8	1100.7
17.5°	976.8	996.8	1039.5	1086.5	1106.4	1099.3	1089.3	1085.0	1082.2	1080.7	1085.0
20°	1006.7	1026.6	1069.4	1113.5	1107.9	1077.9	1063.7	1053.7	1045.1	1040.9	1046.6
22.5°	1039.5	1058.0	1102.1	1132.0	1089.3	1043.7	1016.7	1001.1	986.8	978.2	984.0
25°	1077.9	1096.4	1139.2	1137.7	1056.6	992.5	949.8	924.1	908.5	899.9	899.9
27.5°	1123.5	1139.2	1180.5	1123.5	1011.0	924.1	861.5	837.3	833.0	825.9	825.9
30°	1170.5	1183.2	1218.8	1090.8	948.4	834.4	766.1	754.7	756.2	749.0	750.4
32.5°	1218.8	1231.7	1241.7	1042.3	867.2	733.4	687.7	679.2	677.8	672.1	666.5
35°	1287.3	1305.8	1244.5	976.8	769.0	649.4	616.5	608.0	599.4	579.5	579.5
37.5°	1391.2	1411.2	1237.4	895.7	667.8	583.8	553.9	542.6	528.3	508.3	501.2
40°	1533.6	1533.6	1221.7	804.6	586.7	531.1	502.7	488.5	472.7	452.9	448.6
42.5°	1701.6	1661.8	1197.6	712.0	526.8	495.5	469.9	454.2	435.8	413.0	410.1
45°	1898.1	1789.9	1163.4	629.4	482.7	474.1	458.5	431.5	400.2	375.9	371.6
47.5°	2089.0	1905.2	1130.6	571.0	445.7	465.6	452.9	407.2	364.6	330.3	326.1
50°	2298.3	2007.7	1092.2	522.6	417.3	459.9	445.7	371.6	324.7	300.4	297.6
52.5°	2507.6	2111.7	1050.9	471.4	393.0	448.6	428.6	346.1	323.3	290.5	286.2
55°	2728.3	2232.8	1002.5	414.4	364.6	425.8	405.8	344.6	333.2	290.5	280.5
57.5°	2943.3	2366.6	924.1	358.9	333.2	391.6	397.3	336.0	311.8	287.7	276.2
60°	3181.1	2509.0	794.5	311.8	306.2	363.1	385.9	317.5	287.7	279.1	273.4
62.5°	3371.9	2637.2	620.8	279.1	283.4	340.3	371.6	306.2	277.6	270.6	269.1
65°	3454.5	2640.0	445.7	250.6	260.5	319.0	357.4	296.1	269.1	266.3	264.8
67.5°	3367.7	2494.8	313.2	223.5	236.4	299.0	338.9	286.2	260.5	262.0	259.1
70°	3087.1	2188.6	229.2	197.9	213.6	277.6	319.0	273.4	250.6	253.5	249.2
72.5°	2583.1	1705.9	183.7	176.6	195.1	254.9	299.0	259.1	235.0	236.4	227.8
75°	1908.1	1130.6	153.7	158.0	173.7	233.5	273.4	240.6	217.9	212.2	206.4
77.5°	1134.9	580.9	126.7	138.1	155.2	207.9	244.9	217.9	199.4	189.3	185.2
80°	468.5	235.0	103.9	116.7	135.2	185.2	216.5	190.8	178.0	168.1	162.3
82.5°	186.6	115.4	82.6	95.4	114.0	160.9	189.3	168.1	155.2	148.1	132.5
85°	71.2	57.0	55.5	66.9	85.4	123.9	156.6	141.0	131.0	112.5	108.2
87.5°	28.4	25.7	25.7	32.7	48.4	78.4	112.5	98.2	102.5	81.1	82.6
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)