

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: P231167

Luminaire Tested: **ARCH-M-AF48-50-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231167
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-M-AF48-50-D-U-T3
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 305mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6897.8 lumens
Efficiency: N/A
Efficacy: 143.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 48
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

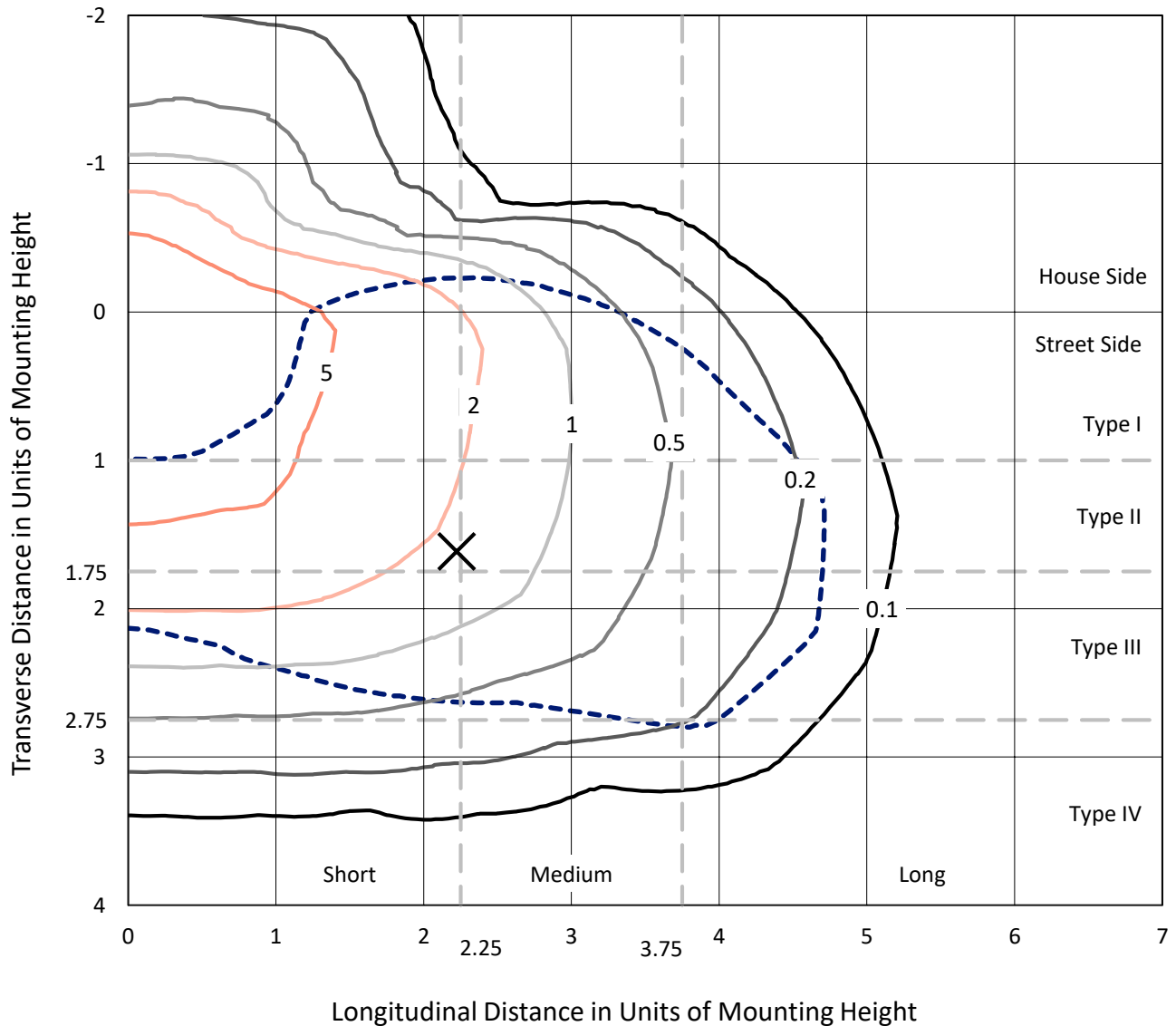


REPORT NUMBER: P231167

CATALOG NUMBER: ARCH-M-AF48-50-D-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

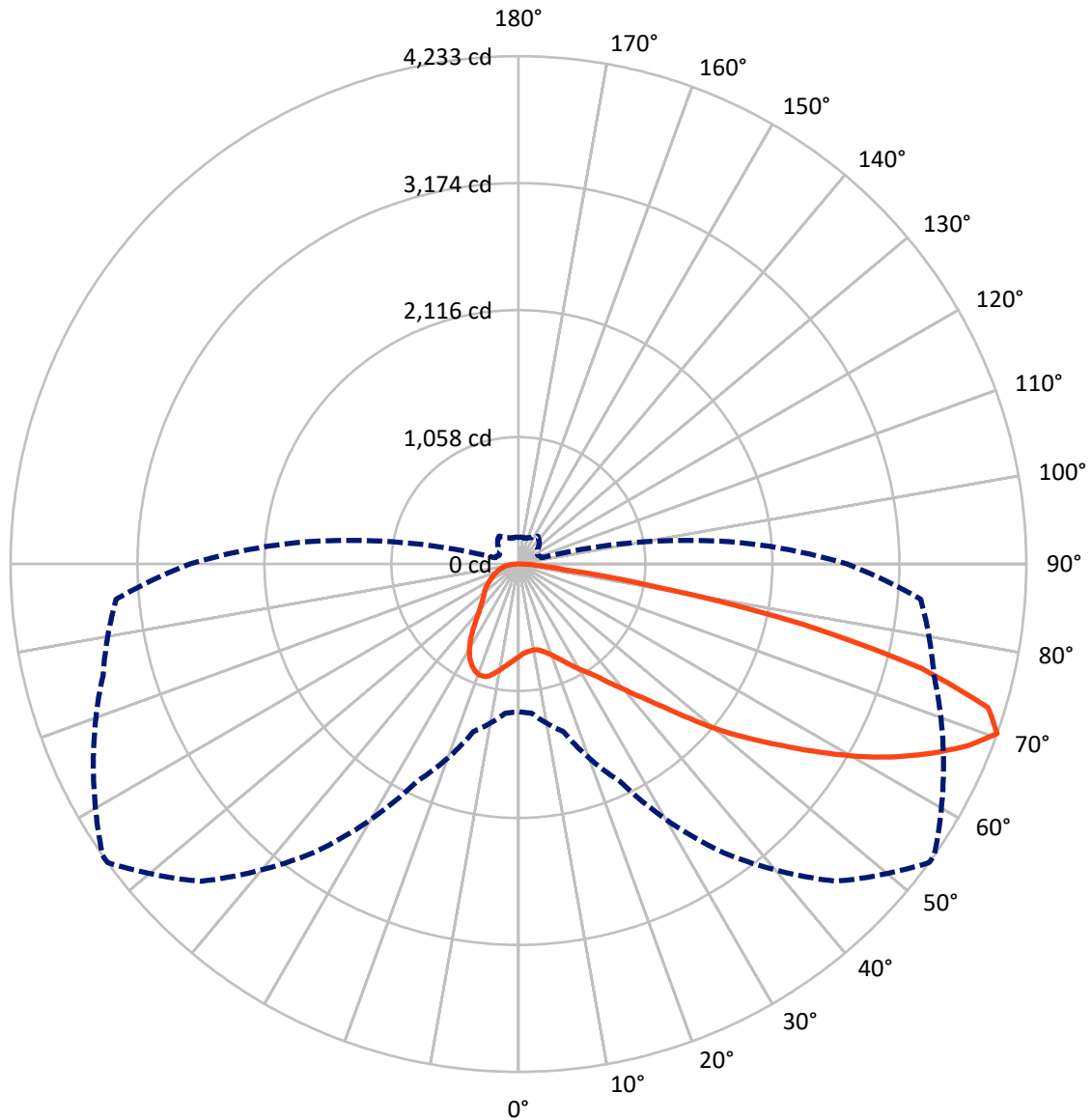


Based on 10 foot mounting height. Maximum calculated value = 9 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P231167

CATALOG NUMBER: ARCH-M-AF48-50-D-U-T3

Luminous Intensity Polar Plot



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



REPORT NUMBER: P231167

CATALOG NUMBER: ARCH-M-AF48-50-D-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1564.4	0.0	1564.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	5333.4	0.0	5333.4
	% Fixture	77.3	0.0	77.3
Total	Lumens	6897.8	0.0	6897.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	1.1
10°-20°	242.0	3.5
20°-30°	420.4	6.1
30°-40°	614.4	8.9
40°-50°	964.3	14.0
50°-60°	1482.8	21.5
60°-70°	1811.7	26.3
70°-80°	1123.2	16.3
80°-90°	163.2	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°	6897.8	100.0
0°-180°	6897.8	100.0

Coefficient of Utilization



REPORT NUMBER: P231167

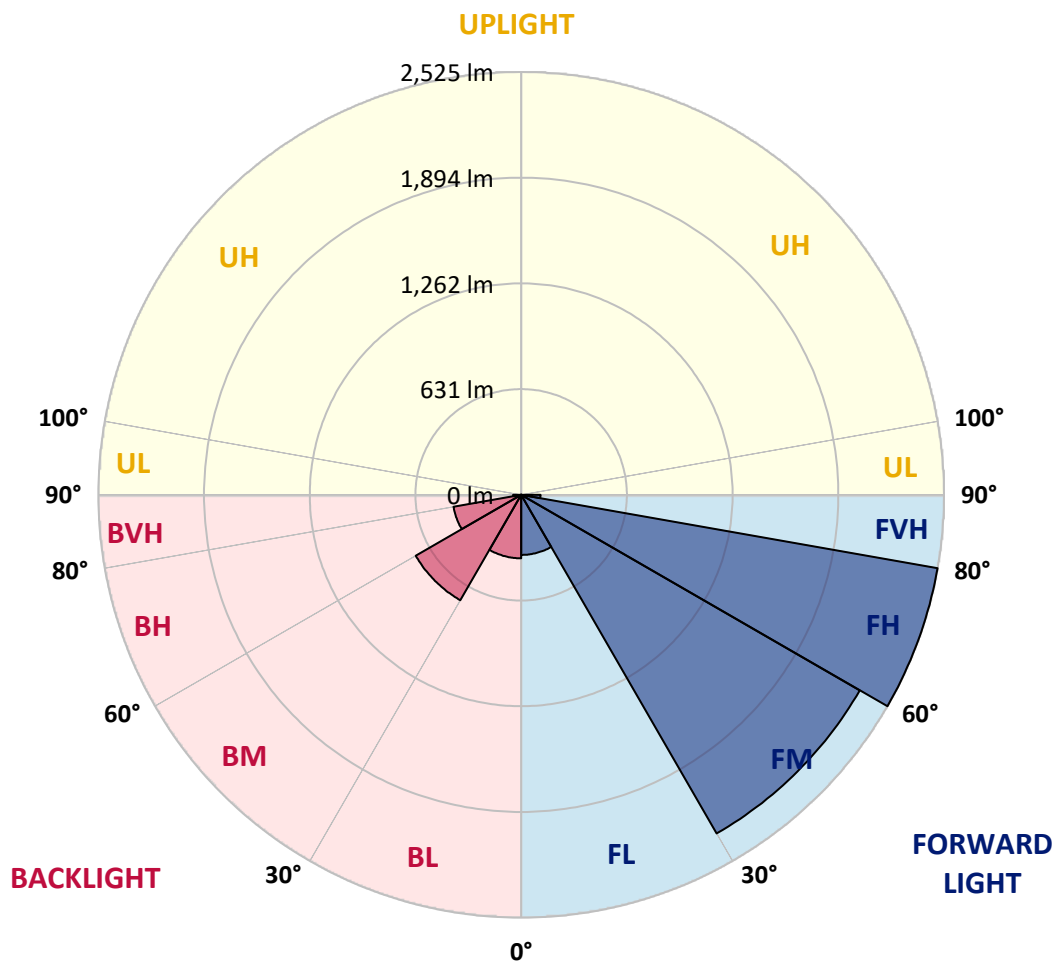
CATALOG NUMBER: ARCH-M-AF48-50-D-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	358.9	5.2			
FM	(30°-60°)	2334.6	33.8			
FH	(60°-80°)	2524.7	36.6			G2/5000
FVH	(80°-90°)	115.2	1.7			G2/225
BL	(0°-30°)	379.3	5.5	B1/500		
BM	(30°-60°)	726.9	10.5	B1/1000		
BH	(60°-80°)	410.2	5.9	B1/500		G1/500
BVH	(80°-90°)	47.9	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





REPORT NUMBER: P231167

CATALOG NUMBER: ARCH-M-AF48-50-D-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7
2.5°	741.4	738.9	738.9	742.7	743.9	747.7	747.7	749.0	752.8	759.1	766.7
5°	718.6	717.4	718.6	723.7	726.3	733.9	736.3	737.6	745.2	755.3	766.7
7.5°	695.9	694.7	697.2	704.8	712.4	723.7	730.1	731.3	742.7	756.6	771.7
10°	688.3	687.1	690.9	697.2	704.8	717.4	727.5	728.8	745.2	761.6	783.1
12.5°	698.5	697.2	701.0	707.3	714.8	723.7	735.1	736.3	757.8	779.3	802.0
15°	723.7	723.7	725.0	728.8	736.3	743.9	754.0	755.3	778.1	803.3	826.0
17.5°	762.9	760.4	760.4	759.1	764.1	767.9	780.5	781.8	805.8	828.6	851.3
20°	810.9	809.6	804.6	798.2	797.0	799.5	812.1	813.5	837.4	856.3	877.8
22.5°	869.0	870.2	858.9	845.0	838.6	842.4	853.9	855.1	872.8	889.1	908.2
25°	946.0	942.2	925.8	905.6	892.9	892.9	904.3	904.3	920.8	930.9	943.5
27.5°	1019.3	1011.7	996.6	967.5	947.3	951.0	962.4	962.4	977.6	981.4	987.7
30°	1098.9	1091.3	1072.4	1035.7	1009.1	1006.7	1020.5	1019.3	1039.5	1038.2	1033.2
32.5°	1196.1	1192.4	1160.7	1114.0	1078.6	1069.8	1082.4	1083.7	1096.3	1092.5	1076.1
35°	1332.5	1331.3	1302.2	1220.1	1173.3	1157.0	1164.5	1164.5	1173.3	1163.3	1135.5
37.5°	1504.2	1506.8	1481.5	1360.3	1294.6	1266.8	1268.0	1266.8	1269.4	1258.0	1229.0
40°	1676.1	1682.3	1681.1	1534.6	1451.3	1403.3	1385.6	1383.0	1389.4	1384.3	1356.5
42.5°	1902.2	1917.3	1881.9	1749.3	1655.9	1575.0	1527.1	1520.7	1534.6	1540.9	1514.4
45°	2137.0	2132.0	2076.5	1980.4	1895.8	1792.2	1701.3	1691.2	1701.3	1720.3	1692.5
47.5°	2259.6	2255.8	2241.9	2193.9	2181.2	2062.6	1924.9	1916.0	1897.1	1923.7	1890.8
50°	2461.6	2465.4	2408.6	2403.5	2456.6	2390.9	2177.5	2157.3	2123.1	2144.6	2116.9
52.5°	2608.2	2591.7	2556.4	2600.6	2766.1	2730.7	2415.0	2406.1	2374.5	2369.5	2356.9
55°	2667.5	2667.5	2673.9	2776.2	3012.4	2965.6	2672.6	2681.5	2638.5	2603.1	2619.6
57.5°	2685.2	2692.8	2747.1	2916.3	3301.6	3148.7	2956.7	2969.4	2907.5	2836.8	2888.6
60°	2598.1	2620.8	2750.9	2995.9	3464.5	3343.3	3256.2	3259.9	3170.2	3066.7	3157.6
62.5°	2374.5	2402.3	2634.7	3028.8	3438.0	3542.9	3539.0	3547.9	3425.4	3296.6	3410.2
65°	2100.4	2128.2	2375.8	2936.6	3417.8	3685.6	3798.0	3821.9	3664.1	3491.0	3568.1
67.5°	1697.5	1734.2	1969.1	2625.9	3319.3	3803.0	4040.5	4065.7	3848.4	3592.1	3554.2
70°	1230.2	1247.9	1444.9	1995.6	2917.7	3738.6	4232.5	4231.2	3909.1	3584.5	3364.8
72.5°	592.4	606.3	776.7	1239.0	2086.5	3172.8	4093.5	4117.5	3825.7	3474.7	2931.6
75°	243.8	257.7	314.5	522.9	1095.1	2096.6	3469.5	3526.4	3474.7	3118.5	2293.7
77.5°	151.6	156.6	184.4	270.3	500.1	978.9	2428.8	2505.9	2753.5	2498.3	1514.4
80°	113.6	117.4	137.7	189.5	315.8	361.2	1206.2	1303.4	1668.4	1433.6	685.8
82.5°	94.7	96.0	109.9	137.7	214.7	207.1	386.5	430.7	778.1	546.9	236.2
85°	88.4	90.9	98.5	98.5	136.4	130.1	160.4	168.0	226.1	186.9	82.1
87.5°	45.4	43.0	87.2	77.0	70.7	63.1	68.2	73.2	84.6	89.7	36.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P231167

CATALOG NUMBER: ARCH-M-AF48-50-D-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7
2.5°	769.2	772.9	779.3	785.6	793.2	802.0	807.1	813.5	818.5	815.9	814.7
5°	772.9	779.3	793.2	805.8	821.0	838.6	850.1	862.7	872.8	875.3	871.5
7.5°	779.3	790.6	809.6	832.4	852.5	875.3	892.9	910.6	923.3	925.8	925.8
10°	794.4	807.1	832.4	862.7	886.7	910.6	930.9	944.8	956.2	961.2	961.2
12.5°	815.9	831.0	861.4	898.0	924.5	947.3	958.6	964.9	970.1	975.1	976.3
15°	841.2	857.6	894.3	933.3	961.2	972.5	972.5	971.3	971.3	973.8	976.3
17.5°	866.4	884.1	922.0	963.7	981.4	975.1	966.3	962.4	959.9	958.6	962.4
20°	892.9	910.6	948.6	987.7	982.6	956.2	943.5	934.7	927.1	923.3	928.3
22.5°	922.0	938.5	977.6	1004.1	966.3	925.8	901.8	887.9	875.3	867.7	872.8
25°	956.2	972.5	1010.5	1009.1	937.2	880.4	842.4	819.7	805.8	798.2	798.2
27.5°	996.6	1010.5	1047.1	996.6	896.7	819.7	764.1	742.7	738.9	732.5	732.5
30°	1038.2	1049.5	1081.2	967.5	841.2	740.1	679.5	669.4	670.6	664.4	665.6
32.5°	1081.2	1092.5	1101.4	924.5	769.2	650.5	610.1	602.5	601.2	596.2	591.1
35°	1141.8	1158.2	1103.9	866.4	682.0	575.9	546.9	539.3	531.7	514.0	514.0
37.5°	1234.0	1251.7	1097.6	794.4	592.4	517.8	491.3	481.2	468.6	450.9	444.6
40°	1360.3	1360.3	1083.7	713.6	520.4	471.1	445.9	433.2	419.3	401.6	397.8
42.5°	1509.4	1474.0	1062.2	631.6	467.3	439.6	416.9	402.9	386.5	366.3	363.8
45°	1683.7	1587.6	1032.0	558.2	428.2	420.6	406.7	382.7	355.0	333.5	329.7
47.5°	1852.9	1689.9	1002.9	506.5	395.4	413.0	401.6	361.2	323.4	293.1	289.2
50°	2038.5	1780.9	968.7	463.5	370.1	408.0	395.4	329.7	288.0	266.5	264.0
52.5°	2224.2	1873.1	932.1	418.1	348.6	397.8	380.1	306.9	286.7	257.7	253.9
55°	2420.0	1980.4	889.1	367.5	323.4	377.7	360.0	305.7	295.5	257.7	248.8
57.5°	2610.7	2099.2	819.7	318.2	295.5	347.3	352.4	298.1	276.6	255.1	245.0
60°	2821.6	2225.5	704.8	276.6	271.6	322.1	342.3	281.6	255.1	247.6	242.5
62.5°	2990.9	2339.2	550.7	247.6	251.3	301.9	329.7	271.6	246.3	240.0	238.8
65°	3064.1	2341.6	395.4	222.3	231.2	282.9	317.0	262.7	238.8	236.2	235.0
67.5°	2987.1	2212.8	277.8	198.2	209.7	265.3	300.6	253.9	231.2	232.4	229.9
70°	2738.2	1941.3	203.4	175.5	189.5	246.3	282.9	242.5	222.3	224.8	221.1
72.5°	2291.2	1513.1	163.0	156.6	173.1	226.1	265.3	229.9	208.4	209.7	202.1
75°	1692.5	1002.9	136.4	140.2	154.1	207.1	242.5	213.5	193.2	188.2	183.1
77.5°	1006.7	515.4	112.4	122.5	137.7	184.4	217.3	193.2	176.9	168.0	164.2
80°	415.5	208.4	92.2	103.5	120.0	164.2	192.0	169.3	157.8	149.0	144.0
82.5°	165.4	102.3	73.2	84.6	101.1	142.7	168.0	149.0	137.7	131.3	117.4
85°	63.1	50.5	49.3	59.3	75.8	109.9	138.9	125.0	116.2	99.7	96.0
87.5°	25.3	22.7	22.7	29.1	43.0	69.5	99.7	87.2	90.9	72.0	73.2
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)