

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: P214717

Luminaire Tested: **ARCH-AF24-60-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214717
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-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6729 lumens
Efficiency: N/A
Efficacy: 105.1 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

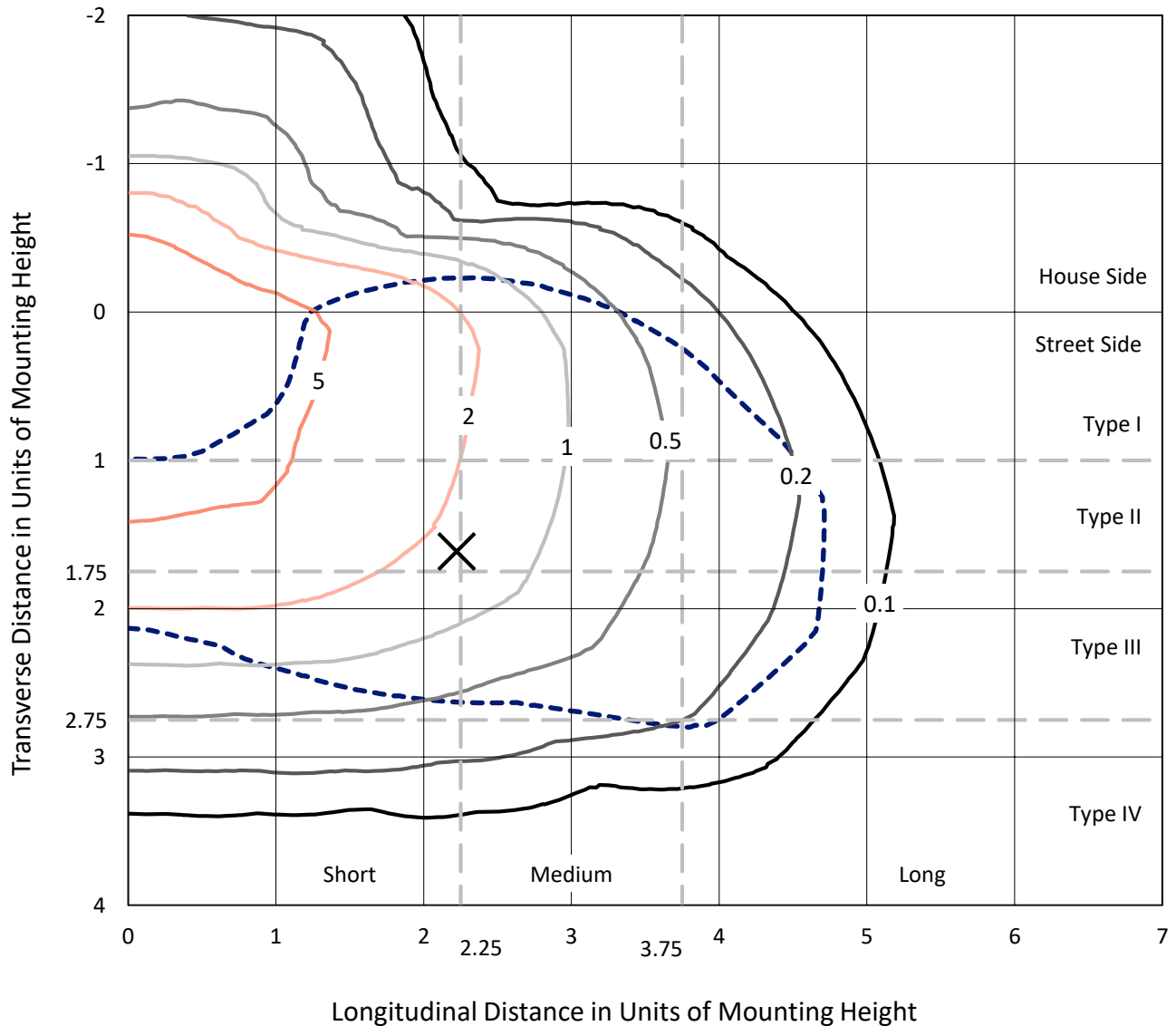
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

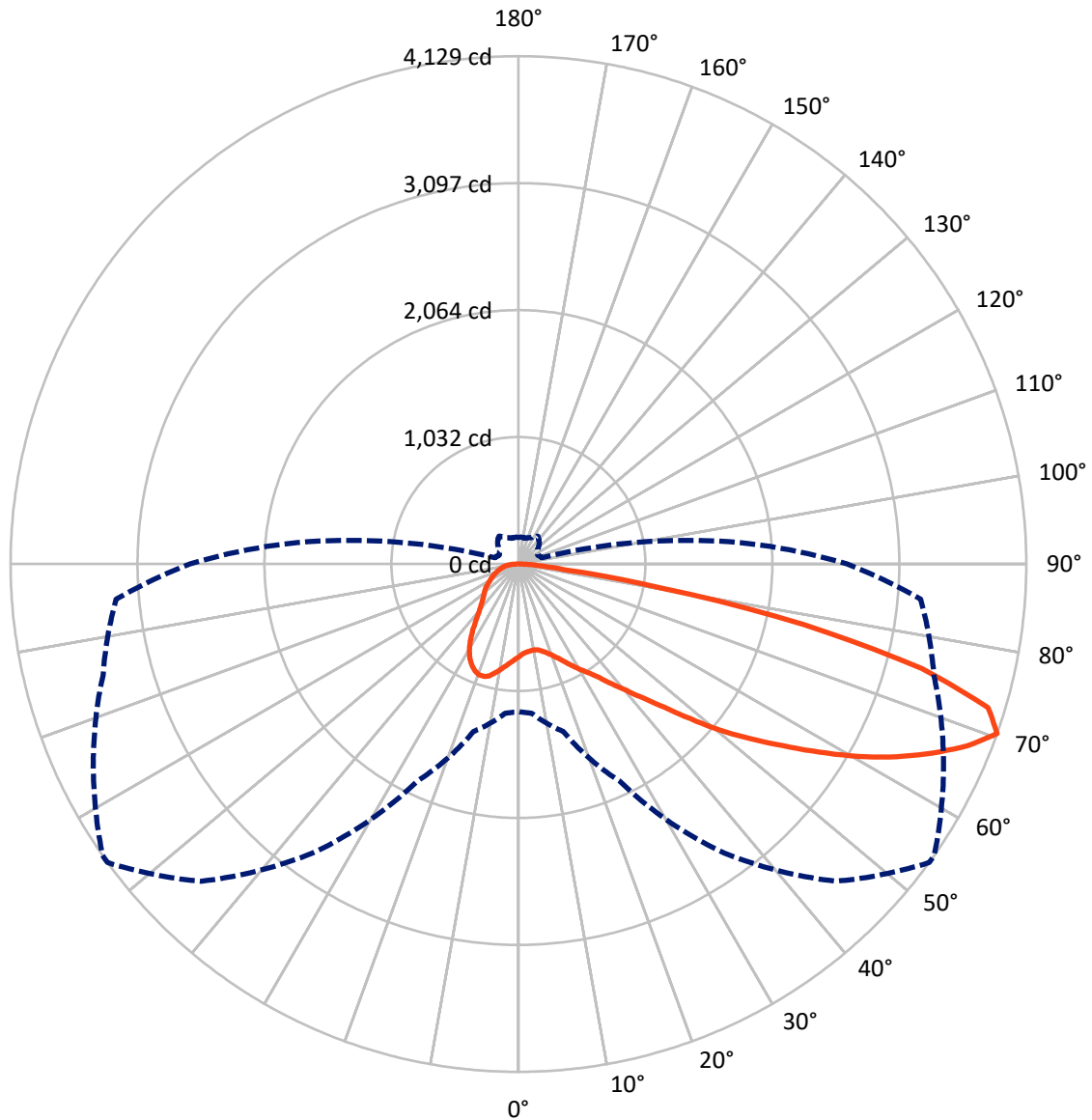


Based on 10 foot mounting height. Maximum calculated value = 8.7 fc
 Type III - Short - Non-Cutoff

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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	1526.1	0.0	1526.1
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	5202.9	0.0	5202.9
	% Fixture	77.3	0.0	77.3
Total	Lumens	6729.0	0.0	6729.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	1.1
10°-20°	236.1	3.5
20°-30°	410.1	6.1
30°-40°	599.4	8.9
40°-50°	940.7	14.0
50°-60°	1446.6	21.5
60°-70°	1767.3	26.3
70°-80°	1095.8	16.3
80°-90°	159.2	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°	6729.0	100.0
0°-180°	6729.0	100.0

Coefficient of Utilization



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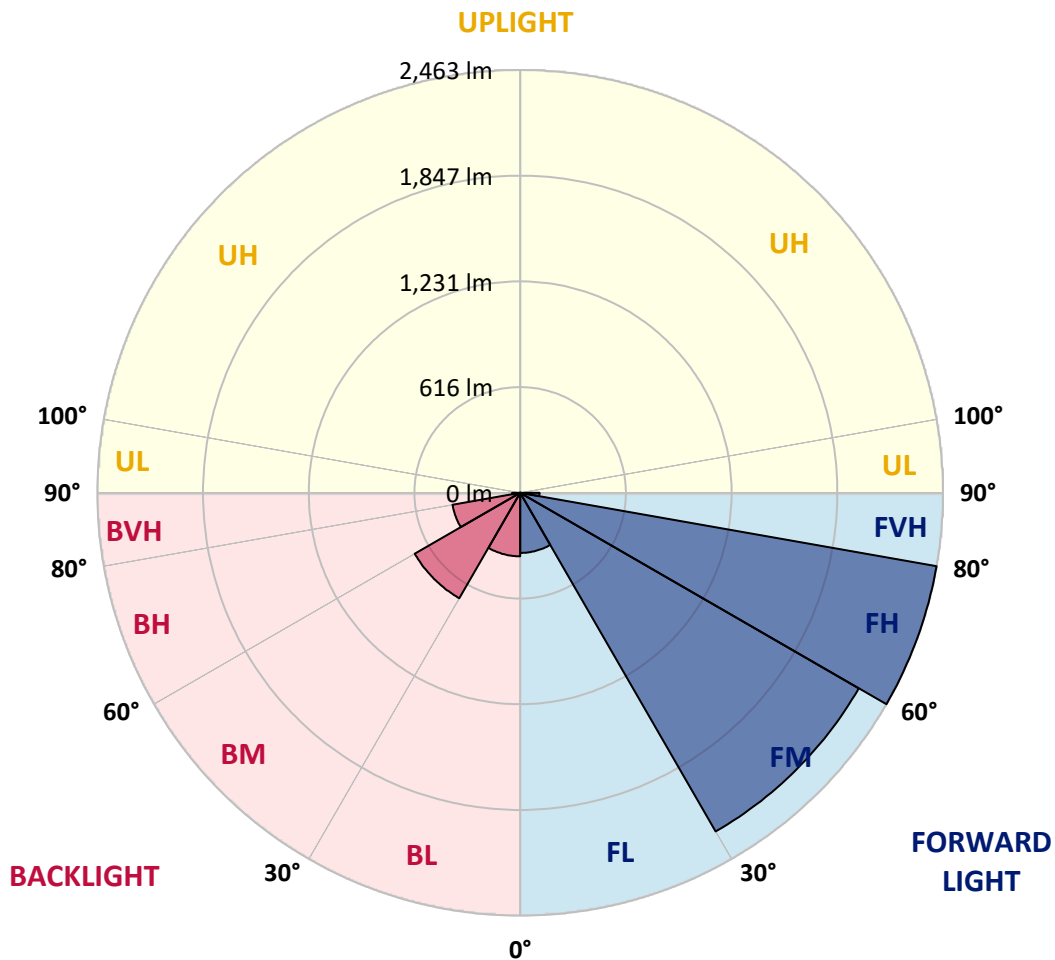
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	350.1	5.2			
FM	(30°-60°)	2277.5	33.8			
FH	(60°-80°)	2462.9	36.6			G2/5000
FVH	(80°-90°)	112.4	1.7			G2/225
BL	(0°-30°)	370.0	5.5	B1/500		
BM	(30°-60°)	709.2	10.5	B1/1000		
BH	(60°-80°)	400.2	5.9	B1/500		G1/500
BVH	(80°-90°)	46.8	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°	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8
2.5°	723.3	720.8	720.8	724.5	725.7	729.4	729.4	730.7	734.4	740.5	747.9
5°	701.1	699.9	701.1	706.0	708.5	715.9	718.3	719.6	727.0	736.8	747.9
7.5°	678.9	677.7	680.1	687.5	694.9	706.0	712.2	713.4	724.5	738.1	752.8
10°	671.5	670.3	674.0	680.1	687.5	699.9	709.7	710.9	727.0	743.0	763.9
12.5°	681.4	680.1	683.8	690.0	697.4	706.0	717.1	718.3	739.3	760.2	782.4
15°	706.0	706.0	707.2	710.9	718.3	725.7	735.6	736.8	759.0	783.6	805.8
17.5°	744.2	741.7	741.7	740.5	745.4	749.1	761.5	762.7	786.1	808.3	830.5
20°	791.0	789.8	784.9	778.7	777.5	779.9	792.3	793.5	816.9	835.4	856.3
22.5°	847.7	848.9	837.9	824.3	818.1	821.8	832.9	834.2	851.4	867.4	885.9
25°	922.9	919.2	903.2	883.4	871.1	871.1	882.2	882.2	898.2	908.1	920.4
27.5°	994.3	986.9	972.2	943.8	924.1	927.8	938.9	938.9	953.7	957.4	963.5
30°	1072.0	1064.6	1046.1	1010.4	984.5	982.0	995.6	994.3	1014.1	1012.8	1007.9
32.5°	1166.8	1163.1	1132.3	1086.7	1052.2	1043.6	1055.9	1057.2	1069.5	1065.8	1049.8
35°	1299.9	1298.7	1270.3	1190.2	1144.7	1128.6	1136.0	1136.0	1144.7	1134.8	1107.7
37.5°	1467.5	1469.9	1445.3	1327.0	1262.9	1235.8	1237.1	1235.8	1238.3	1227.2	1198.9
40°	1635.1	1641.2	1640.0	1497.1	1415.7	1368.9	1351.7	1349.2	1355.4	1350.4	1323.3
42.5°	1855.6	1870.4	1835.9	1706.5	1615.3	1536.5	1489.7	1483.5	1497.1	1503.2	1477.3
45°	2084.8	2079.9	2025.6	1932.0	1849.4	1748.4	1659.7	1649.8	1659.7	1678.2	1651.1
47.5°	2204.3	2200.6	2187.1	2140.2	2127.9	2012.1	1877.8	1869.2	1850.7	1876.6	1844.5
50°	2401.4	2405.1	2349.7	2344.8	2396.5	2332.4	2124.2	2104.5	2071.2	2092.2	2065.1
52.5°	2544.4	2528.4	2493.9	2537.0	2698.4	2663.9	2355.9	2347.2	2316.4	2311.5	2299.2
55°	2602.3	2602.3	2608.4	2708.2	2938.7	2893.1	2607.2	2615.8	2573.9	2539.4	2555.5
57.5°	2619.5	2626.9	2679.9	2845.0	3220.8	3071.7	2884.4	2896.8	2836.4	2767.4	2817.9
60°	2534.5	2556.7	2683.6	2922.6	3379.8	3261.5	3176.5	3180.2	3092.7	2991.6	3080.4
62.5°	2316.4	2343.5	2570.2	2954.7	3353.9	3456.2	3452.5	3461.1	3341.6	3215.9	3326.8
65°	2049.1	2076.2	2317.7	2864.7	3334.2	3595.4	3705.1	3728.5	3574.4	3405.6	3480.8
67.5°	1656.0	1691.7	1920.9	2561.6	3238.1	3710.0	3941.6	3966.3	3754.3	3504.2	3467.2
70°	1200.1	1217.4	1409.6	1946.8	2846.2	3647.1	4128.9	4127.7	3813.5	3496.8	3282.4
72.5°	577.9	591.4	757.8	1208.7	2035.5	3095.1	3993.4	4016.8	3732.2	3389.6	2859.8
75°	237.8	251.4	306.8	510.1	1068.3	2045.4	3384.7	3440.1	3389.6	3042.2	2237.6
77.5°	147.9	152.8	179.9	263.7	487.9	954.9	2369.4	2444.6	2686.1	2437.2	1477.3
80°	110.9	114.6	134.3	184.8	308.0	352.4	1176.7	1271.6	1627.7	1398.5	669.1
82.5°	92.4	93.6	107.2	134.3	209.5	202.1	377.0	420.2	759.0	533.5	230.4
85°	86.2	88.7	96.1	96.1	133.1	126.9	156.5	163.9	220.6	182.4	80.1
87.5°	44.4	41.9	85.0	75.2	69.0	61.6	66.5	71.5	82.6	87.5	35.7
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°	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8	752.8
2.5°	750.4	754.1	760.2	766.4	773.8	782.4	787.3	793.5	798.4	796.0	794.7
5°	754.1	760.2	773.8	786.1	800.9	818.1	829.2	841.6	851.4	853.9	850.2
7.5°	760.2	771.3	789.8	812.0	831.7	853.9	871.1	888.4	900.7	903.2	903.2
10°	775.0	787.3	812.0	841.6	865.0	888.4	908.1	921.6	932.7	937.7	937.7
12.5°	796.0	810.7	840.3	876.1	901.9	924.1	935.2	941.4	946.3	951.2	952.4
15°	820.6	836.6	872.4	910.6	937.7	948.7	948.7	947.5	947.5	950.0	952.4
17.5°	845.2	862.5	899.5	940.1	957.4	951.2	942.6	938.9	936.4	935.2	938.9
20°	871.1	888.4	925.3	963.5	958.6	932.7	920.4	911.8	904.4	900.7	905.6
22.5°	899.5	915.5	953.7	979.6	942.6	903.2	879.7	866.2	853.9	846.5	851.4
25°	932.7	948.7	985.7	984.5	914.2	858.8	821.8	799.7	786.1	778.7	778.7
27.5°	972.2	985.7	1021.4	972.2	874.8	799.7	745.4	724.5	720.8	714.6	714.6
30°	1012.8	1023.9	1054.7	943.8	820.6	722.0	662.9	653.0	654.3	648.1	649.3
32.5°	1054.7	1065.8	1074.4	901.9	750.4	634.6	595.1	587.7	586.5	581.6	576.6
35°	1113.9	1129.9	1076.9	845.2	665.4	561.9	533.5	526.1	518.7	501.5	501.5
37.5°	1203.8	1221.1	1070.7	775.0	577.9	505.2	479.3	469.4	457.1	439.9	433.7
40°	1327.0	1327.0	1057.2	696.2	507.6	459.6	434.9	422.6	409.1	391.8	388.1
42.5°	1472.4	1437.9	1036.2	616.1	455.9	428.8	406.6	393.1	377.0	357.3	354.9
45°	1642.4	1548.8	1006.7	544.6	417.7	410.3	396.7	373.3	346.2	325.3	321.6
47.5°	1807.6	1648.6	978.3	494.1	385.7	402.9	391.8	352.4	315.4	285.9	282.2
50°	1988.7	1737.3	945.1	452.2	361.0	398.0	385.7	321.6	280.9	260.0	257.5
52.5°	2169.8	1827.3	909.3	407.8	340.1	388.1	370.9	299.4	279.7	251.4	247.7
55°	2360.8	1932.0	867.4	358.6	315.4	368.4	351.2	298.2	288.3	251.4	242.7
57.5°	2546.8	2047.8	799.7	310.5	288.3	338.8	343.8	290.8	269.8	248.9	239.0
60°	2752.6	2171.0	687.5	269.8	264.9	314.2	333.9	274.8	248.9	241.5	236.6
62.5°	2917.7	2281.9	537.2	241.5	245.2	294.5	321.6	264.9	240.3	234.1	232.9
65°	2989.2	2284.4	385.7	216.9	225.5	276.0	309.3	256.3	232.9	230.4	229.2
67.5°	2914.0	2158.7	271.1	193.4	204.5	258.7	293.2	247.7	225.5	226.7	224.2
70°	2671.3	1893.8	198.4	171.3	184.8	240.3	276.0	236.6	216.9	219.3	215.6
72.5°	2235.1	1476.1	158.9	152.8	168.8	220.6	258.7	224.2	203.3	204.5	197.1
75°	1651.1	978.3	133.1	136.8	150.3	202.1	236.6	208.2	188.5	183.6	178.7
77.5°	982.0	502.7	109.7	119.5	134.3	179.9	211.9	188.5	172.5	163.9	160.2
80°	405.4	203.3	89.9	101.0	117.1	160.2	187.3	165.1	154.0	145.4	140.5
82.5°	161.4	99.8	71.5	82.6	98.6	139.2	163.9	145.4	134.3	128.1	114.6
85°	61.6	49.3	48.1	57.9	73.9	107.2	135.5	122.0	113.4	97.3	93.6
87.5°	24.6	22.2	22.2	28.3	41.9	67.8	97.3	85.0	88.7	70.2	71.5
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)