

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: P214712

Luminaire Tested: **ARCH-AF16-60-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214712
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-AF16-60-D-U-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6492.2 lumens
Efficiency: N/A
Efficacy: 103.1 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

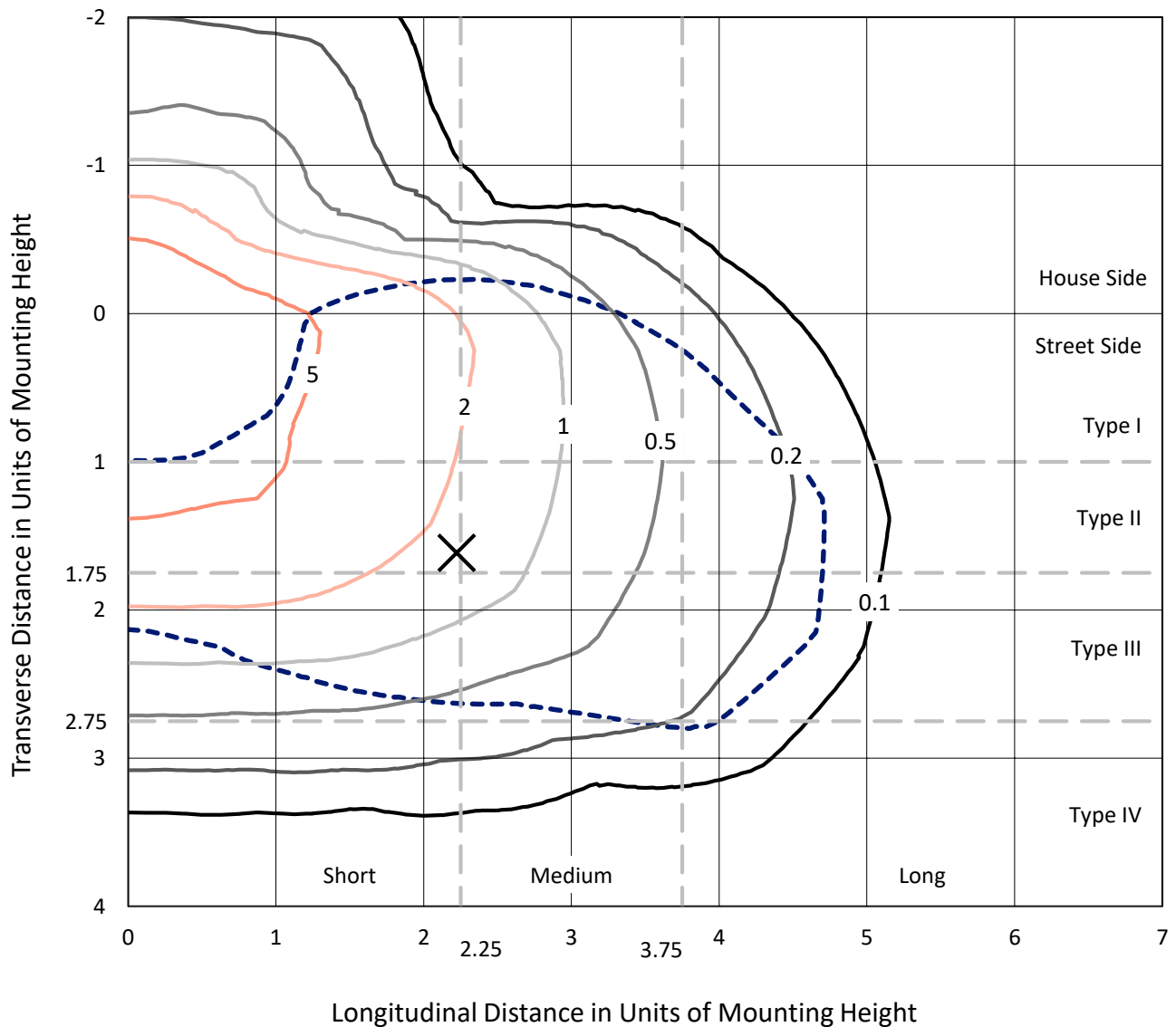
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

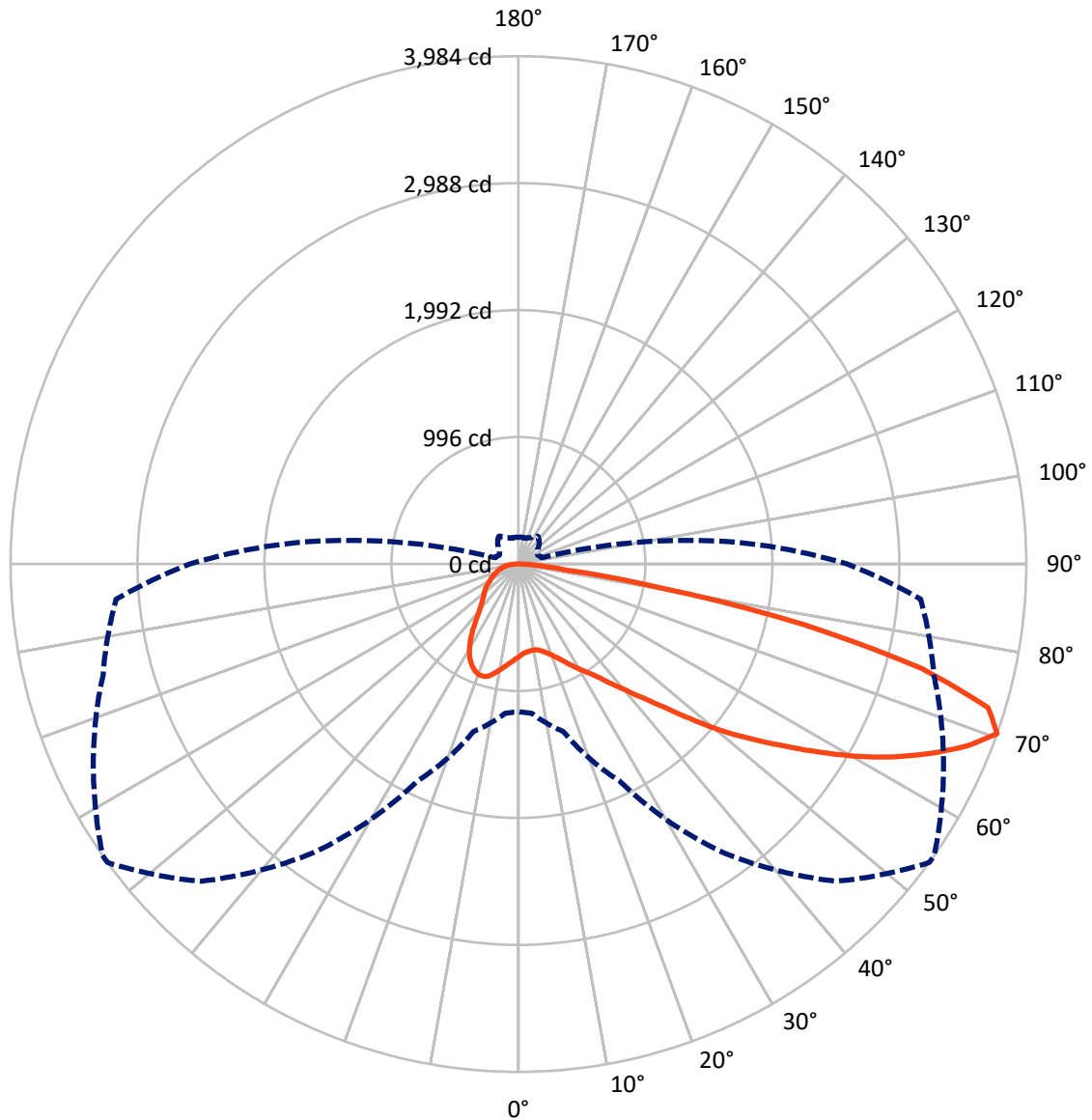
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.4 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	1472.4	0.0	1472.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	5019.8	0.0	5019.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	6492.2	0.0	6492.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	1.1
10°-20°	227.8	3.5
20°-30°	395.7	6.1
30°-40°	578.3	8.9
40°-50°	907.6	14.0
50°-60°	1395.7	21.5
60°-70°	1705.1	26.3
70°-80°	1057.2	16.3
80°-90°	153.6	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°	6492.2	100.0
0°-180°	6492.2	100.0



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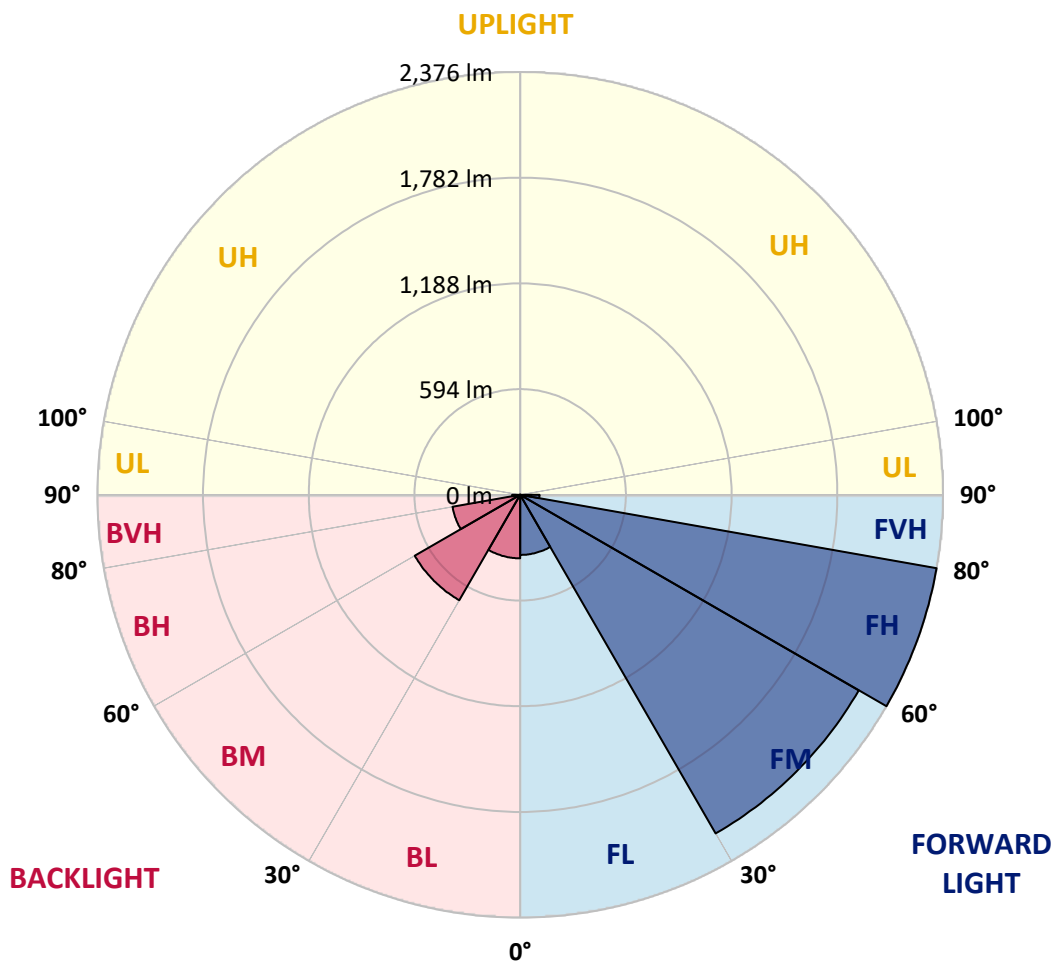
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	337.8	5.2			
FM	(30°-60°)	2197.3	33.8			
FH	(60°-80°)	2376.2	36.6			G2/5000
FVH	(80°-90°)	108.4	1.7			G2/225
BL	(0°-30°)	357.0	5.5	B1/500		
BM	(30°-60°)	684.2	10.5	B1/1000		
BH	(60°-80°)	386.1	5.9	B1/500		G1/500
BVH	(80°-90°)	45.1	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°	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3
2.5°	697.8	695.4	695.4	699.0	700.3	703.7	703.7	704.9	708.5	714.4	721.5
5°	676.5	675.2	676.5	681.1	683.5	690.6	693.0	694.3	701.3	710.8	721.5
7.5°	655.0	653.8	656.2	663.3	670.6	681.1	687.1	688.4	699.0	712.1	726.3
10°	647.9	646.7	650.3	656.2	663.3	675.2	684.7	685.9	701.3	716.8	737.1
12.5°	657.4	656.2	659.8	665.7	672.8	681.1	691.8	693.0	713.3	733.4	754.9
15°	681.1	681.1	682.4	685.9	693.0	700.3	709.7	710.8	732.2	756.1	777.5
17.5°	718.1	715.6	715.6	714.4	719.3	722.8	734.7	735.9	758.5	779.9	801.2
20°	763.1	762.0	757.2	751.2	750.2	752.5	764.4	765.6	788.2	806.0	826.2
22.5°	818.0	819.1	808.4	795.3	789.4	792.9	803.6	804.8	821.4	836.9	854.7
25°	890.4	886.8	871.4	852.3	840.4	840.4	851.1	851.1	866.7	876.1	888.1
27.5°	959.3	952.2	938.0	910.5	891.5	895.2	905.9	905.9	920.1	923.7	929.6
30°	1034.2	1027.1	1009.2	974.8	949.8	947.5	960.5	959.3	978.4	977.3	972.4
32.5°	1125.8	1122.2	1092.5	1048.5	1015.2	1007.0	1018.8	1019.9	1031.9	1028.3	1012.9
35°	1254.2	1252.9	1225.7	1148.4	1104.4	1088.9	1096.1	1096.1	1104.4	1094.9	1068.7
37.5°	1415.9	1418.1	1394.4	1280.3	1218.5	1192.3	1193.5	1192.3	1194.8	1184.1	1156.7
40°	1577.4	1583.5	1582.3	1444.4	1366.0	1320.7	1304.1	1301.8	1307.7	1302.9	1276.8
42.5°	1790.3	1804.5	1771.3	1646.4	1558.5	1482.4	1437.2	1431.3	1444.4	1450.3	1425.4
45°	2011.5	2006.6	1954.3	1864.0	1784.3	1686.9	1601.3	1591.8	1601.3	1619.1	1593.0
47.5°	2126.7	2123.1	2110.2	2064.9	2053.0	1941.3	1811.7	1803.5	1785.6	1810.5	1779.7
50°	2317.0	2320.4	2267.0	2262.2	2312.2	2250.4	2049.4	2030.5	1998.4	2018.6	1992.4
52.5°	2454.8	2439.3	2406.1	2447.7	2603.4	2570.1	2272.9	2264.6	2234.9	2230.2	2218.3
55°	2510.7	2510.7	2516.7	2612.9	2835.3	2791.2	2515.4	2523.8	2483.4	2450.0	2465.6
57.5°	2527.3	2534.5	2585.6	2744.9	3107.5	2963.6	2783.0	2794.9	2736.6	2670.0	2718.7
60°	2445.3	2466.7	2589.1	2819.8	3260.9	3146.6	3064.7	3068.2	2983.9	2886.4	2972.0
62.5°	2234.9	2261.0	2479.7	2850.7	3235.8	3334.5	3331.0	3339.3	3224.0	3102.8	3209.7
65°	1976.9	2003.0	2236.1	2763.9	3216.8	3468.9	3574.6	3597.3	3448.7	3285.8	3358.3
67.5°	1597.7	1632.3	1853.2	2471.5	3124.2	3579.5	3802.9	3826.7	3622.2	3380.9	3345.2
70°	1157.8	1174.5	1360.0	1878.2	2746.1	3518.8	3983.6	3982.4	3679.3	3373.7	3166.9
72.5°	557.6	570.7	731.1	1166.3	1963.8	2986.2	3852.8	3875.4	3600.8	3270.3	2759.2
75°	229.5	242.5	296.0	492.1	1030.7	1973.3	3265.5	3319.1	3270.3	2935.1	2158.9
77.5°	142.7	147.4	173.6	254.3	470.8	921.3	2286.0	2358.6	2591.5	2351.4	1425.4
80°	107.0	110.6	129.6	178.3	297.1	340.1	1135.3	1226.9	1570.4	1349.3	645.5
82.5°	89.1	90.3	103.5	129.6	202.1	194.9	363.8	405.4	732.2	514.7	222.4
85°	83.2	85.5	92.8	92.8	128.4	122.5	151.0	158.1	212.8	175.9	77.2
87.5°	42.8	40.4	82.1	72.5	66.5	59.4	64.3	69.0	79.6	84.4	34.5
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°	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3	726.3
2.5°	724.0	727.5	733.4	739.4	746.6	754.9	759.7	765.6	770.3	768.0	766.8
5°	727.5	733.4	746.6	758.5	772.7	789.4	800.0	811.9	821.4	823.9	820.2
7.5°	733.4	744.2	762.0	783.4	802.4	823.9	840.4	857.1	869.0	871.4	871.4
10°	747.8	759.7	783.4	811.9	834.5	857.1	876.1	889.3	899.9	904.6	904.6
12.5°	768.0	782.2	810.7	845.2	870.1	891.5	902.3	908.3	913.0	917.8	919.0
15°	791.7	807.2	841.7	878.6	904.6	915.4	915.4	914.2	914.2	916.5	919.0
17.5°	815.5	832.1	867.8	907.1	923.7	917.8	909.4	905.9	903.5	902.3	905.9
20°	840.4	857.1	892.7	929.6	924.9	899.9	888.1	879.6	872.6	869.0	873.7
22.5°	867.8	883.3	920.1	945.1	909.4	871.4	848.8	835.8	823.9	816.7	821.4
25°	899.9	915.4	951.0	949.8	882.0	828.6	792.9	771.5	758.5	751.2	751.2
27.5°	938.0	951.0	985.5	938.0	844.0	771.5	719.3	699.0	695.4	689.5	689.5
30°	977.3	987.9	1017.6	910.5	791.7	696.6	639.6	630.1	631.2	625.3	626.5
32.5°	1017.6	1028.3	1036.7	870.1	724.0	612.2	574.1	567.0	565.9	561.1	556.3
35°	1074.7	1090.1	1038.9	815.5	641.9	542.0	514.7	507.6	500.5	483.8	483.8
37.5°	1161.4	1178.1	1033.0	747.8	557.6	487.4	462.3	452.9	441.1	424.4	418.5
40°	1280.3	1280.3	1019.9	671.6	489.8	443.4	419.7	407.7	394.7	378.0	374.4
42.5°	1420.6	1387.3	999.7	594.4	439.9	413.6	392.3	379.2	363.8	344.7	342.4
45°	1584.7	1494.3	971.2	525.4	402.9	395.8	382.7	360.2	334.0	313.8	310.3
47.5°	1743.9	1590.6	943.9	476.7	372.1	388.8	378.0	340.1	304.3	275.8	272.3
50°	1918.7	1676.1	911.8	436.3	348.3	383.9	372.1	310.3	271.1	250.9	248.4
52.5°	2093.4	1763.0	877.4	393.5	328.1	374.4	357.9	288.9	269.9	242.5	239.0
55°	2277.7	1864.0	836.9	346.0	304.3	355.4	338.8	287.7	278.2	242.5	234.2
57.5°	2457.2	1975.7	771.5	299.6	278.2	326.9	331.7	280.6	260.4	240.2	230.6
60°	2655.8	2094.6	663.3	260.4	255.5	303.0	322.2	265.1	240.2	233.0	228.3
62.5°	2815.1	2201.6	518.3	233.0	236.5	284.1	310.3	255.5	231.8	225.8	224.6
65°	2884.0	2204.0	372.1	209.2	217.5	266.3	298.4	247.3	224.6	222.4	221.1
67.5°	2811.5	2082.7	261.5	186.7	197.3	249.6	283.0	239.0	217.5	218.7	216.4
70°	2577.3	1827.2	191.4	165.2	178.3	231.8	266.3	228.3	209.2	211.6	208.0
72.5°	2156.4	1424.2	153.4	147.4	162.9	212.8	249.6	216.4	196.1	197.3	190.2
75°	1593.0	943.9	128.4	131.9	145.0	194.9	228.3	200.9	181.9	177.1	172.4
77.5°	947.5	485.0	105.8	115.3	129.6	173.6	204.5	181.9	166.4	158.1	154.5
80°	391.1	196.1	86.8	97.5	113.0	154.5	180.8	159.3	148.6	140.3	135.5
82.5°	155.7	96.2	69.0	79.6	95.0	134.3	158.1	140.3	129.6	123.7	110.6
85°	59.4	47.5	46.3	55.8	71.3	103.5	130.8	117.7	109.4	94.0	90.3
87.5°	23.8	21.5	21.5	27.4	40.4	65.3	94.0	82.1	85.5	67.7	69.0
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)