

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: P214866

Luminaire Tested: **ARCH-AF16-60-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214866
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
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-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6844.6 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - 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

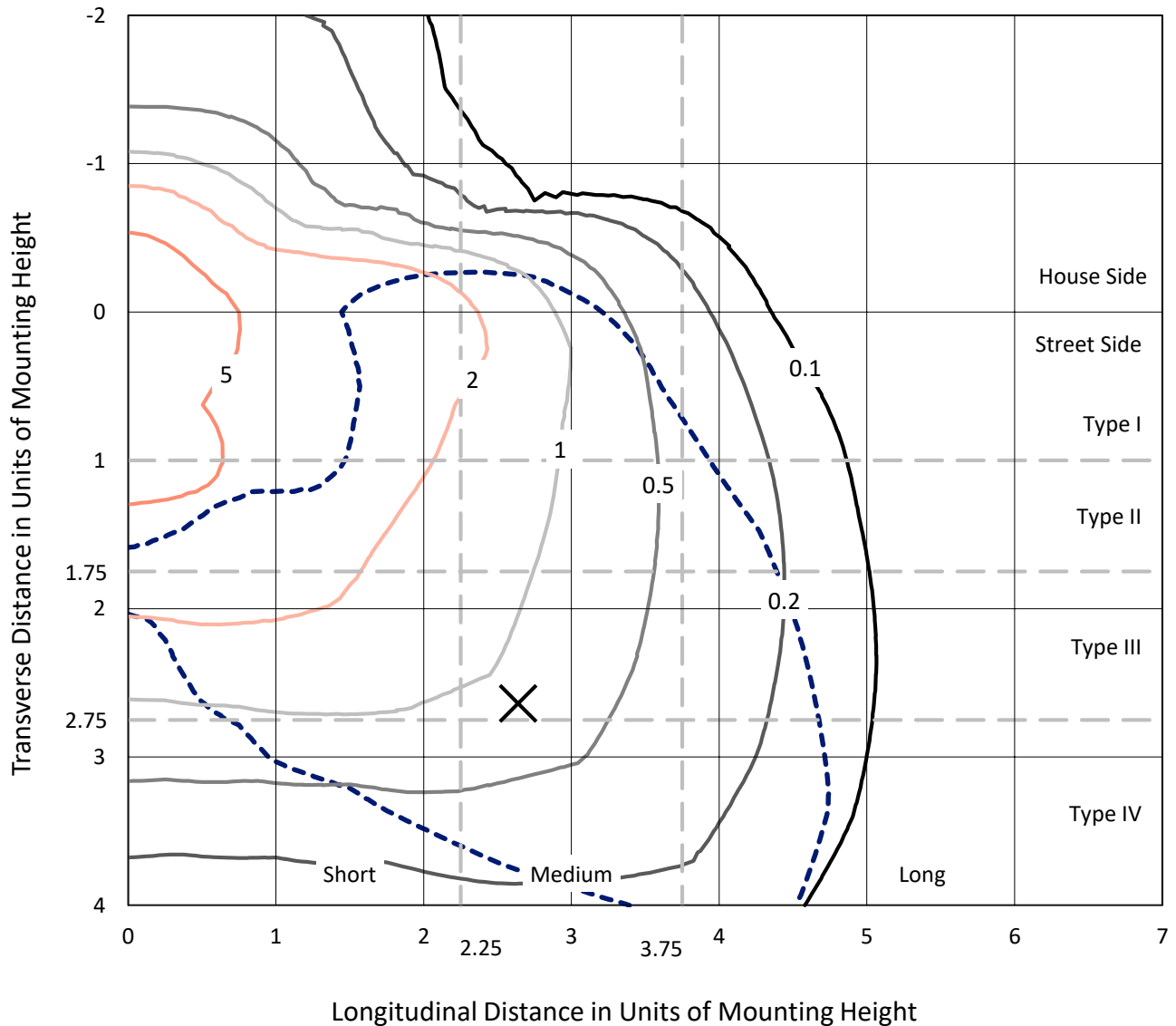


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

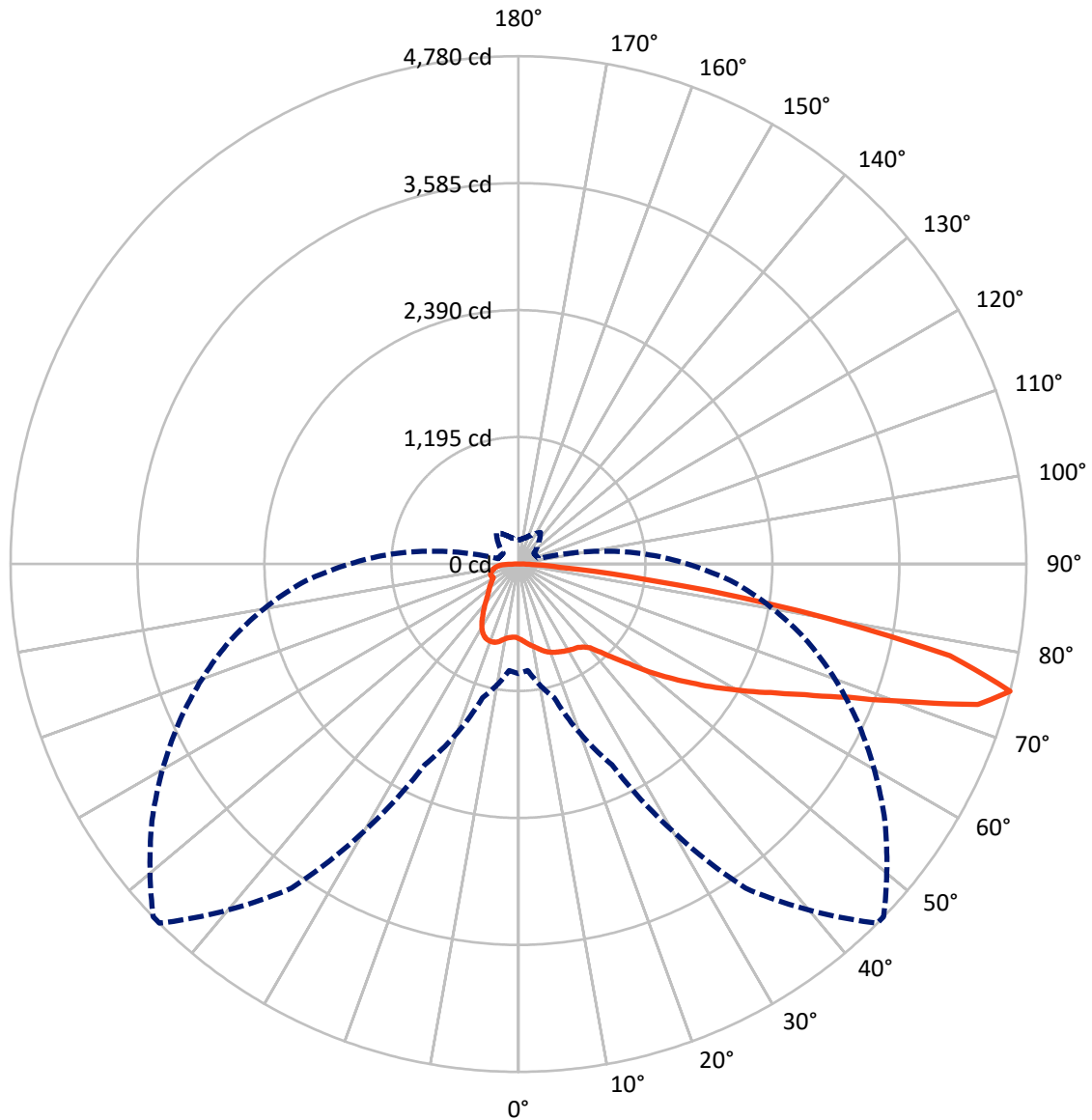


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1585.6	0.0	1585.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5259.0	0.0	5259.0
	% Fixture	76.8	0.0	76.8
Total	Lumens	6844.6	0.0	6844.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	1.0
10°-20°	225.3	3.3
20°-30°	386.7	5.6
30°-40°	540.8	7.9
40°-50°	793.3	11.6
50°-60°	1235.8	18.1
60°-70°	1778.2	26.0
70°-80°	1549.0	22.6
80°-90°	266.0	3.9
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°	6844.6	100.0
0°-180°	6844.6	100.0

Coefficient of Utilization



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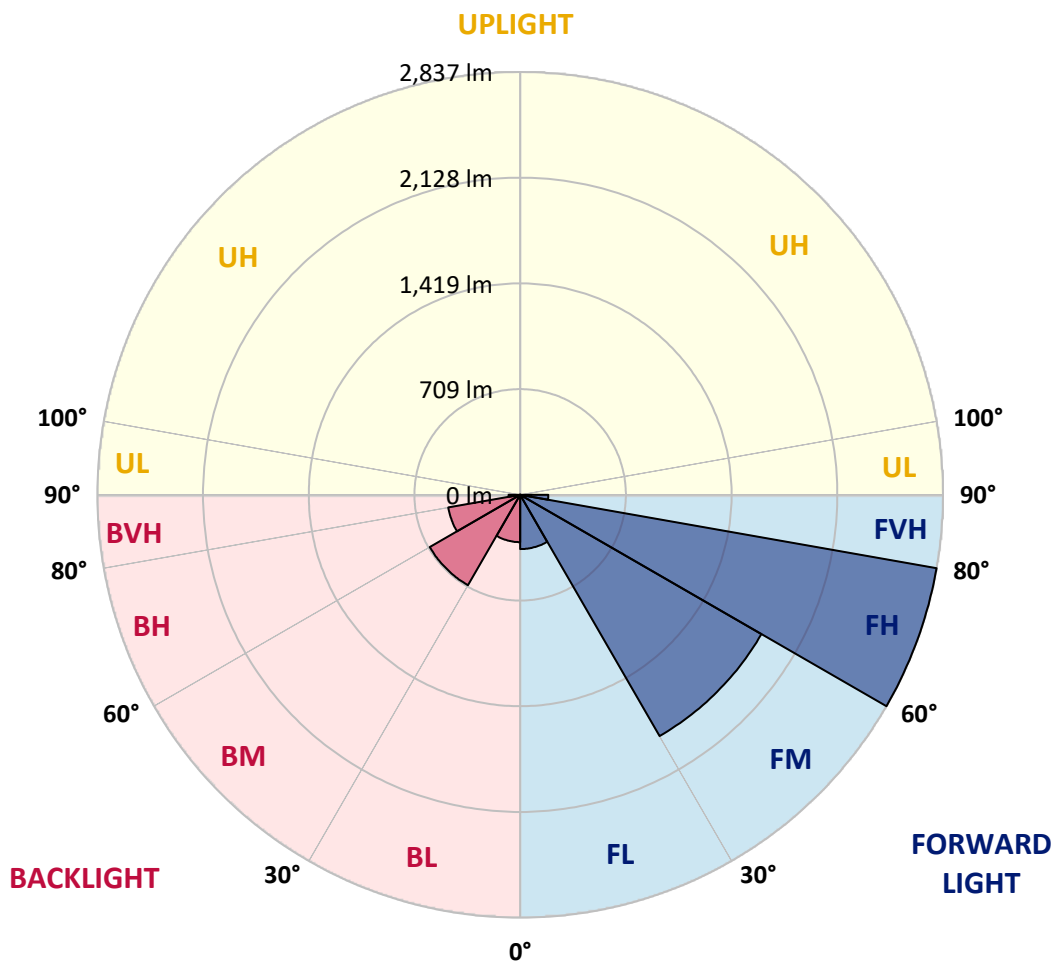
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	364.0	5.3			
FM (30°-60°)	1869.1	27.3			
FH (60°-80°)	2837.1	41.5			G2/5000
FVH (80°-90°)	188.7	2.8			G2/225
BL (0°-30°)	317.6	4.6	B1/500		
BM (30°-60°)	700.8	10.2	B1/1000		
BH (60°-80°)	490.0	7.2	B1/500		G1/500
BVH (80°-90°)	77.3	1.1			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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6
2.5°	736.3	731.0	731.0	727.0	727.0	720.3	717.6	716.3	709.6	705.6	701.6
5°	778.9	772.2	770.9	761.6	757.6	743.0	741.6	732.3	720.3	708.3	699.0
7.5°	817.5	813.6	806.8	797.5	785.5	766.9	765.6	750.9	731.0	714.9	701.6
10°	845.5	842.8	833.5	821.5	808.1	789.5	788.2	772.2	748.3	729.7	711.0
12.5°	878.7	874.7	862.8	846.8	832.2	814.9	813.6	800.2	773.6	749.6	725.7
15°	910.7	905.4	890.7	874.7	858.8	844.1	844.1	829.5	801.5	773.6	745.6
17.5°	926.7	924.0	909.4	892.0	878.7	868.1	866.7	853.4	825.5	796.2	765.6
20°	932.0	933.3	920.0	901.4	892.0	886.7	885.4	876.1	845.5	817.5	788.2
22.5°	930.7	934.7	924.0	904.1	901.4	901.4	901.4	890.7	866.7	838.8	809.5
25°	936.0	941.3	933.3	909.4	909.4	914.7	914.7	909.4	888.0	864.1	834.8
27.5°	954.6	958.6	952.0	918.7	920.0	928.0	926.7	928.0	914.7	892.0	862.8
30°	977.2	982.6	974.6	933.3	932.0	940.0	940.0	946.6	937.3	913.4	889.4
32.5°	1038.5	1037.2	1011.9	949.3	945.3	953.3	953.3	959.9	954.6	936.0	913.4
35°	1220.9	1200.9	1145.0	1001.3	961.3	965.3	965.3	977.2	979.9	965.3	945.3
37.5°	1407.3	1400.6	1358.1	1139.7	1019.9	990.6	989.3	1006.6	1018.6	1006.6	993.3
40°	1595.1	1589.8	1580.5	1324.8	1142.3	1035.8	1031.9	1046.5	1067.9	1059.8	1051.8
42.5°	1769.5	1766.8	1776.1	1507.2	1298.1	1133.0	1121.1	1103.8	1134.4	1131.7	1131.7
45°	1906.6	1913.2	1918.5	1677.6	1467.2	1258.2	1243.6	1185.0	1226.2	1236.8	1244.9
47.5°	1983.8	1989.1	2007.8	1844.1	1636.3	1403.3	1392.6	1296.8	1351.4	1383.3	1405.9
50°	2094.4	2079.7	2095.7	2006.5	1840.1	1592.4	1563.1	1447.3	1516.5	1572.4	1625.7
52.5°	2200.9	2176.9	2190.2	2194.2	2071.7	1777.5	1746.8	1624.3	1710.9	1798.8	1893.3
55°	2296.7	2295.4	2308.7	2376.6	2295.4	1975.8	1941.3	1820.0	1945.2	2039.8	2199.5
57.5°	2374.0	2387.3	2445.9	2588.3	2553.7	2191.6	2152.9	2047.7	2195.6	2290.1	2555.0
60°	2464.5	2485.8	2583.0	2768.0	2789.4	2417.8	2378.0	2302.0	2452.5	2548.4	2966.5
62.5°	2495.1	2525.8	2725.4	2957.1	3035.7	2665.5	2629.6	2579.0	2722.8	2809.3	3376.6
65°	2291.4	2350.0	2804.0	3054.3	3300.7	2963.8	2933.1	2889.2	2991.7	3049.0	3654.8
67.5°	2235.5	2262.2	2650.9	3194.1	3549.6	3347.2	3316.6	3240.7	3243.4	3219.4	3745.3
70°	2156.9	2186.3	2493.7	3299.3	3906.4	3871.8	3834.5	3610.8	3473.7	3328.6	3566.9
72.5°	1837.4	1828.0	2148.9	3015.7	4078.2	4521.5	4477.6	4008.9	3644.2	3234.1	3010.3
75°	1031.9	1005.3	1303.4	2086.3	3724.1	4779.8	4778.5	4210.0	3524.3	2817.3	2049.1
77.5°	299.6	291.5	430.0	874.7	2507.0	4152.8	4203.3	3797.3	2941.1	2023.8	1125.0
80°	141.2	143.8	185.1	288.9	1070.5	2680.1	2825.3	2500.4	1757.5	933.3	464.6
82.5°	89.2	90.5	126.4	186.4	452.7	1216.9	1336.8	1125.0	696.3	403.5	205.0
85°	56.0	56.0	83.9	122.4	270.3	388.8	422.1	383.4	298.2	219.7	111.8
87.5°	30.6	30.6	50.6	70.6	147.8	125.1	129.2	153.1	186.4	134.5	56.0
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°	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6	701.6
2.5°	700.3	697.7	693.7	692.3	691.0	689.7	691.0	693.7	691.0	691.0	692.3
5°	696.3	693.7	688.3	688.3	689.7	691.0	697.7	701.6	703.0	703.0	703.0
7.5°	696.3	692.3	688.3	689.7	692.3	697.7	708.3	714.9	720.3	721.6	721.6
10°	703.0	697.7	695.0	697.7	705.6	709.6	720.3	731.0	737.6	740.3	740.3
12.5°	714.9	709.6	709.6	714.9	725.7	731.0	740.3	748.3	756.3	760.3	760.3
15°	735.0	728.3	729.7	739.0	750.9	756.3	762.9	765.6	772.2	777.5	777.5
17.5°	753.6	747.0	749.6	760.3	768.2	770.9	774.9	773.6	776.2	780.2	781.5
20°	774.9	768.2	769.6	776.2	777.5	774.9	774.9	770.9	769.6	776.2	778.9
22.5°	796.2	789.5	788.2	784.2	777.5	770.9	766.9	762.9	760.3	766.9	769.6
25°	821.5	812.2	805.5	788.2	770.9	758.9	753.6	750.9	749.6	756.3	758.9
27.5°	849.5	840.1	820.2	782.9	754.9	735.0	731.0	731.0	733.7	737.6	740.3
30°	876.1	866.7	830.8	770.9	727.0	697.7	693.7	697.7	704.3	708.3	712.3
32.5°	902.8	893.3	837.5	752.3	685.7	648.4	645.8	652.4	663.1	665.7	668.4
35°	938.7	929.4	845.5	725.7	633.7	593.8	591.2	595.2	604.5	608.5	612.4
37.5°	989.3	984.0	857.4	696.3	585.8	541.9	533.9	531.2	536.5	535.2	540.5
40°	1055.8	1059.8	878.7	657.8	539.2	494.0	476.7	468.6	463.3	452.7	458.0
42.5°	1153.1	1155.7	902.8	613.8	499.3	448.7	426.1	411.4	400.8	383.4	386.2
45°	1295.5	1272.9	930.7	567.2	463.3	412.8	386.2	368.8	354.1	339.5	340.8
47.5°	1484.5	1415.4	961.3	528.6	427.4	383.4	359.5	339.5	322.2	310.3	311.6
50°	1717.5	1592.4	992.0	492.7	391.5	360.8	339.5	318.2	301.0	288.9	287.6
52.5°	2025.1	1805.4	1011.9	452.7	355.5	340.8	322.2	302.3	280.9	266.3	264.9
55°	2344.6	2053.1	1029.2	404.8	320.9	318.2	308.9	286.2	261.0	242.3	239.7
57.5°	2696.2	2318.0	1042.5	358.1	294.2	299.6	296.9	270.3	242.3	225.0	223.7
60°	3015.7	2592.3	999.9	316.9	270.3	280.9	283.6	261.0	246.3	250.3	251.6
62.5°	3337.9	2804.0	837.5	286.2	254.3	268.9	291.5	290.2	283.6	290.2	291.5
65°	3453.7	2847.9	593.8	261.0	238.3	274.3	316.9	314.3	283.6	271.6	268.9
67.5°	3388.5	2717.5	399.5	241.0	226.4	280.9	343.5	314.3	272.9	257.0	251.6
70°	3078.3	2396.6	292.9	221.1	215.7	279.6	358.1	312.9	267.6	250.3	243.7
72.5°	2455.2	1849.4	235.7	202.3	199.7	272.9	366.1	310.3	262.3	243.7	235.7
75°	1589.8	1150.3	198.4	183.7	175.7	262.3	362.1	302.3	255.6	231.7	226.4
77.5°	737.6	495.3	169.1	162.4	153.1	246.3	350.2	286.2	241.0	218.4	211.6
80°	343.5	234.4	142.5	141.2	137.2	233.0	334.2	267.6	223.7	205.0	194.4
82.5°	183.7	141.2	115.8	115.8	119.8	217.1	314.3	245.0	201.0	191.7	163.8
85°	97.2	81.2	83.9	90.5	102.5	191.7	287.6	221.1	175.7	146.5	142.5
87.5°	49.3	52.0	52.0	61.3	78.6	155.8	237.0	182.4	149.1	119.8	117.1
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)