

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: P265956

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265956
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-AF24-60-D-U-T4W-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6563.2 lumens
Efficiency: N/A
Efficacy: 102.5 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): 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

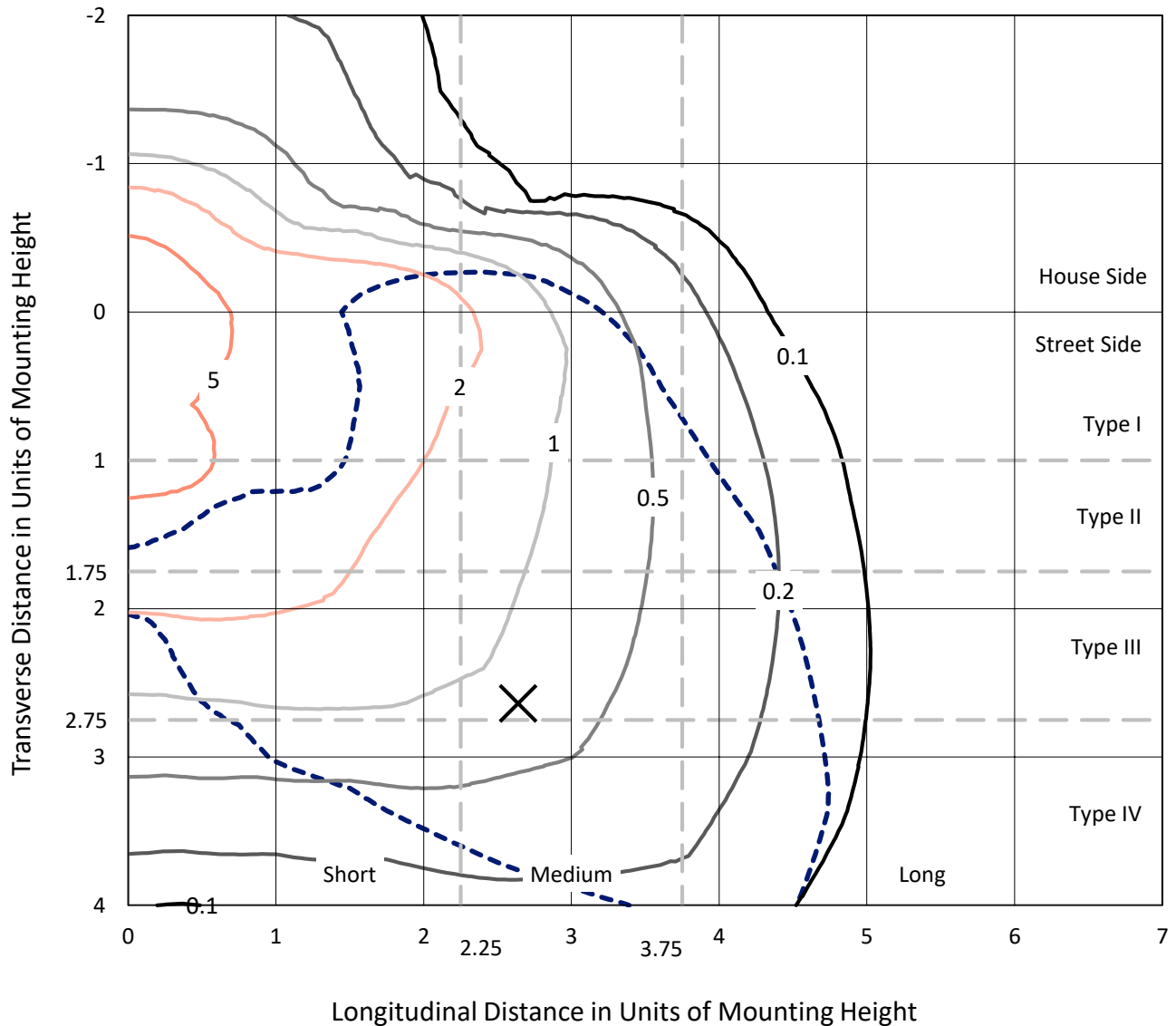


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

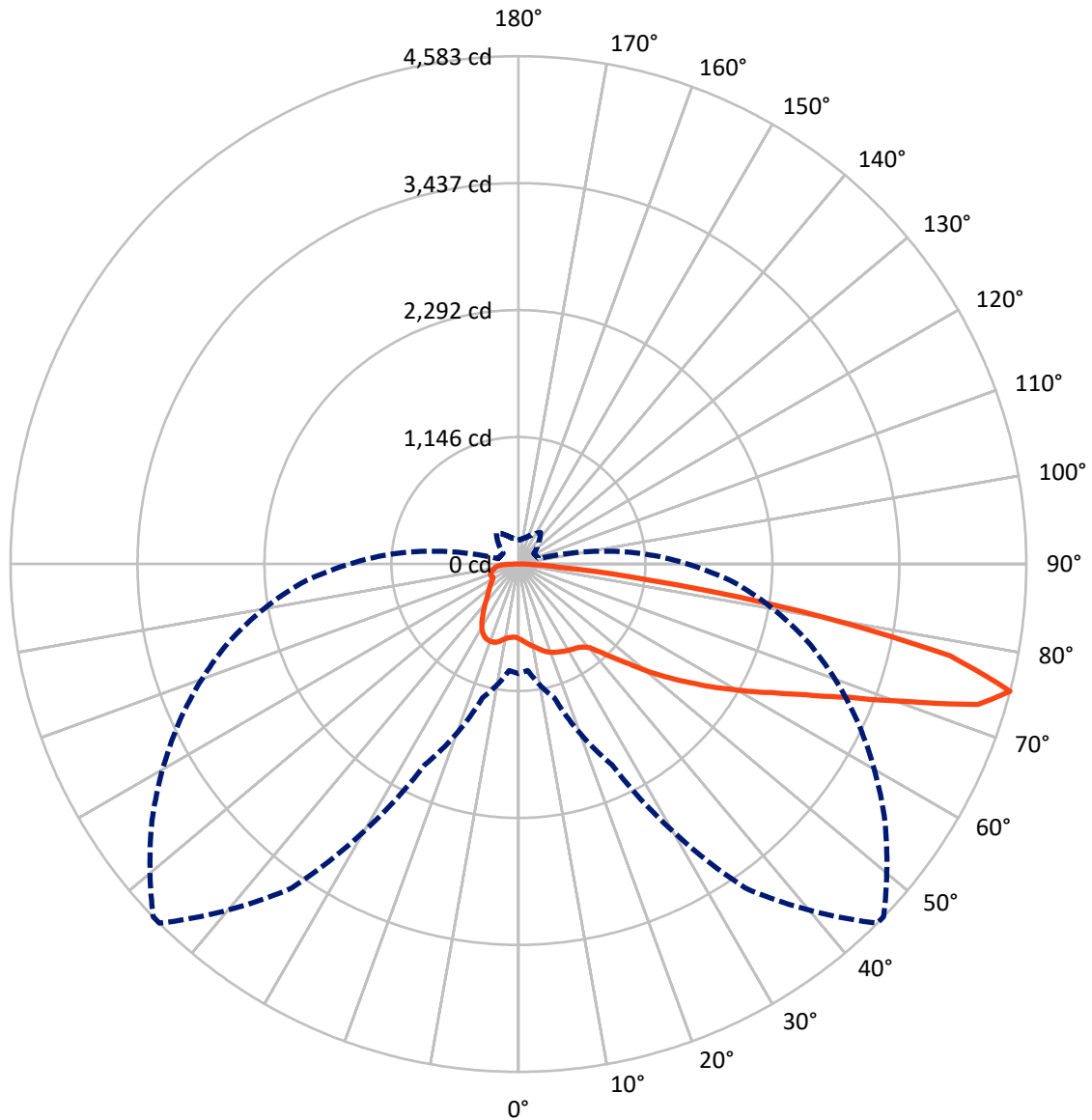


Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type IV - Medium - Non-Cutoff

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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	1520.4	0.0	1520.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5042.8	0.0	5042.8
	% Fixture	76.8	0.0	76.8
Total	Lumens	6563.2	0.0	6563.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.0
10°-20°	216.1	3.3
20°-30°	370.8	5.6
30°-40°	518.6	7.9
40°-50°	760.7	11.6
50°-60°	1185.0	18.1
60°-70°	1705.1	26.0
70°-80°	1485.3	22.6
80°-90°	255.1	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°	6563.2	100.0
0°-180°	6563.2	100.0

Coefficient of Utilization



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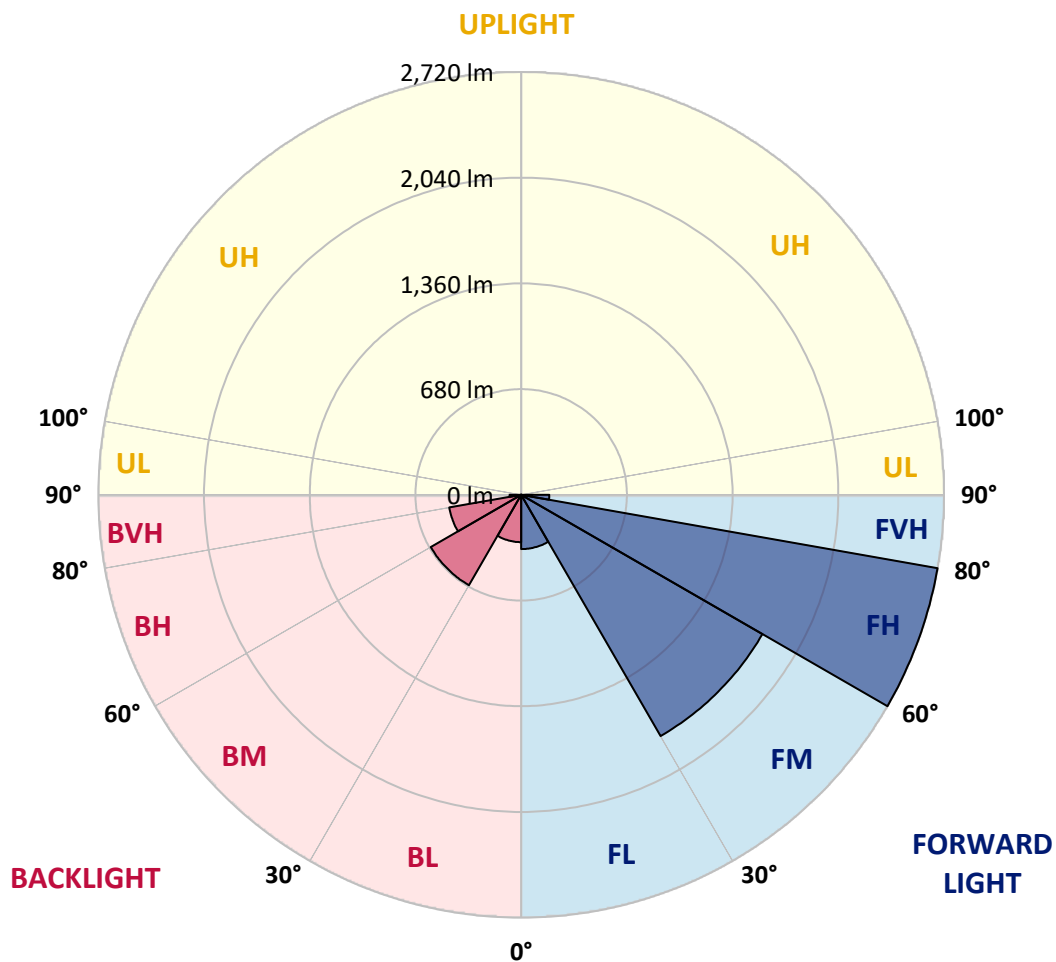
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	349.0	5.3			
FM	(30°-60°)	1792.3	27.3			
FH	(60°-80°)	2720.5	41.5			G2/5000
FVH	(80°-90°)	181.0	2.8			G2/225
BL	(0°-30°)	304.5	4.6	B1/500		
BM	(30°-60°)	671.9	10.2	B1/1000		
BH	(60°-80°)	469.9	7.2	B1/500		G1/500
BVH	(80°-90°)	74.1	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°	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8
2.5°	706.0	700.9	700.9	697.1	697.1	690.6	688.1	686.8	680.5	676.7	672.8
5°	746.9	740.6	739.2	730.2	726.4	712.4	711.1	702.1	690.6	679.2	670.2
7.5°	784.0	780.1	773.7	764.7	753.3	735.4	734.0	720.0	700.9	685.5	672.8
10°	810.7	808.1	799.2	787.8	775.0	757.1	755.8	740.6	717.4	699.6	681.8
12.5°	842.6	838.7	827.2	812.0	798.0	781.3	780.1	767.3	741.8	718.7	695.7
15°	873.2	868.1	854.1	838.7	823.4	809.5	809.5	795.4	768.6	741.8	715.0
17.5°	888.6	886.0	872.0	855.4	842.6	832.4	831.1	818.4	791.5	763.5	734.0
20°	893.6	894.9	882.1	864.3	855.4	850.2	849.0	840.0	810.7	784.0	755.8
22.5°	892.3	896.1	886.0	866.9	864.3	864.3	864.3	854.1	831.1	804.3	776.2
25°	897.5	902.6	894.9	872.0	872.0	877.0	877.0	872.0	851.6	828.5	800.5
27.5°	915.5	919.2	912.9	880.9	882.1	889.9	888.6	889.9	877.0	855.4	827.2
30°	937.1	942.2	934.5	894.9	893.6	901.4	901.4	907.7	898.8	875.8	852.9
32.5°	995.9	994.6	970.3	910.3	906.5	914.1	914.1	920.6	915.5	897.5	875.8
35°	1170.8	1151.5	1098.0	960.1	921.8	925.7	925.7	937.1	939.6	925.7	906.5
37.5°	1349.4	1343.1	1302.3	1092.9	978.0	949.9	948.6	965.1	976.6	965.1	952.5
40°	1529.5	1524.3	1515.4	1270.4	1095.5	993.3	989.5	1003.4	1023.9	1016.3	1008.5
42.5°	1696.7	1694.2	1703.0	1445.3	1244.8	1086.5	1075.0	1058.4	1087.8	1085.2	1085.2
45°	1828.2	1834.6	1839.6	1608.7	1406.9	1206.5	1192.4	1136.3	1175.8	1186.0	1193.7
47.5°	1902.3	1907.5	1925.2	1768.3	1569.1	1345.7	1335.4	1243.6	1295.8	1326.4	1348.1
50°	2008.3	1994.1	2009.5	1924.0	1764.5	1526.8	1498.8	1387.8	1454.1	1507.7	1558.9
52.5°	2110.4	2087.4	2100.1	2104.0	1986.5	1704.4	1675.0	1557.7	1640.6	1724.8	1815.5
55°	2202.3	2200.9	2213.9	2278.9	2200.9	1894.6	1861.4	1745.2	1865.2	1955.9	2109.1
57.5°	2276.3	2289.2	2345.3	2481.8	2448.7	2101.4	2064.5	1963.5	2105.3	2195.8	2449.9
60°	2363.1	2383.7	2476.7	2654.2	2674.7	2318.4	2280.2	2207.4	2351.7	2443.6	2844.5
62.5°	2392.5	2421.9	2613.3	2835.5	2910.9	2555.9	2521.5	2472.9	2610.8	2693.8	3237.8
65°	2197.2	2253.4	2688.6	2928.7	3164.9	2841.9	2812.6	2770.5	2868.7	2923.7	3504.5
67.5°	2143.5	2169.0	2541.9	3062.9	3403.7	3209.6	3180.2	3107.4	3110.0	3087.0	3591.3
70°	2068.3	2096.4	2391.3	3163.7	3745.8	3712.7	3676.9	3462.3	3330.8	3191.8	3420.2
72.5°	1761.8	1753.0	2060.6	2891.7	3910.5	4335.7	4293.4	3844.1	3494.2	3101.0	2886.7
75°	989.5	963.9	1249.9	2000.5	3570.9	4583.3	4582.1	4037.0	3379.5	2701.6	1964.9
77.5°	287.3	279.6	412.4	838.7	2404.0	3981.9	4030.5	3641.1	2820.1	1940.6	1078.9
80°	135.4	137.9	177.4	277.0	1026.5	2570.1	2709.2	2397.7	1685.2	894.9	445.6
82.5°	85.6	86.9	121.4	178.8	434.2	1166.9	1281.8	1078.9	667.7	386.8	196.5
85°	53.5	53.5	80.4	117.5	259.3	372.7	404.6	367.6	286.0	210.7	107.3
87.5°	29.4	29.4	48.5	67.6	141.8	120.1	123.8	146.9	178.8	128.9	53.5
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°	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8	672.8
2.5°	671.6	669.0	665.1	663.8	662.6	661.3	662.6	665.1	662.6	662.6	663.8
5°	667.7	665.1	660.1	660.1	661.3	662.6	669.0	672.8	674.1	674.1	674.1
7.5°	667.7	663.8	660.1	661.3	663.8	669.0	679.2	685.5	690.6	692.0	692.0
10°	674.1	669.0	666.5	669.0	676.7	680.5	690.6	700.9	707.2	709.8	709.8
12.5°	685.5	680.5	680.5	685.5	695.7	700.9	709.8	717.4	725.1	729.0	729.0
15°	704.7	698.3	699.6	708.6	720.0	725.1	731.5	734.0	740.6	745.7	745.7
17.5°	722.5	716.2	718.7	729.0	736.7	739.2	743.1	741.8	744.3	748.2	749.5
20°	743.1	736.7	738.0	744.3	745.7	743.1	743.1	739.2	738.0	744.3	746.9
22.5°	763.5	757.1	755.8	752.1	745.7	739.2	735.4	731.5	729.0	735.4	738.0
25°	787.8	778.8	772.5	755.8	739.2	727.6	722.5	720.0	718.7	725.1	727.6
27.5°	814.6	805.6	786.5	750.8	723.9	704.7	700.9	700.9	703.5	707.2	709.8
30°	840.0	831.1	796.6	739.2	697.1	669.0	665.1	669.0	675.3	679.2	683.0
32.5°	865.5	856.7	803.1	721.2	657.5	621.7	619.2	625.6	635.8	638.3	640.9
35°	900.1	891.1	810.7	695.7	607.8	569.3	566.8	570.7	579.6	583.4	587.3
37.5°	948.6	943.5	822.2	667.7	561.7	519.6	511.9	509.3	514.5	513.2	518.3
40°	1012.4	1016.3	842.6	630.7	517.1	473.6	457.1	449.4	444.3	434.2	439.2
42.5°	1105.6	1108.1	865.5	588.6	478.7	430.3	408.5	394.4	384.2	367.6	370.2
45°	1242.3	1220.4	892.3	543.8	444.3	395.8	370.2	353.7	339.6	325.5	326.9
47.5°	1423.5	1357.1	921.8	506.9	409.8	367.6	344.7	325.5	308.9	297.5	298.7
50°	1647.0	1526.8	951.1	472.4	375.3	345.9	325.5	305.2	288.5	277.0	275.8
52.5°	1941.9	1731.3	970.3	434.2	340.8	326.9	308.9	289.9	269.4	255.4	254.1
55°	2248.3	1968.6	986.9	388.1	307.7	305.2	296.3	274.5	250.3	232.3	229.7
57.5°	2585.3	2222.8	999.6	343.4	282.2	287.3	284.8	259.3	232.3	215.8	214.4
60°	2891.7	2485.7	958.9	303.8	259.3	269.4	271.9	250.3	236.2	239.9	241.3
62.5°	3200.8	2688.6	803.1	274.5	243.8	258.0	279.6	278.4	271.9	278.4	279.6
65°	3311.7	2730.8	569.3	250.3	228.4	263.1	303.8	301.3	271.9	260.5	258.0
67.5°	3249.2	2605.8	382.9	231.0	217.0	269.4	329.4	301.3	261.8	246.4	241.3
70°	2951.7	2298.0	280.9	211.9	206.8	268.1	343.4	300.0	256.6	239.9	233.6
72.5°	2354.2	1773.3	226.0	194.0	191.5	261.8	351.1	297.5	251.5	233.6	226.0
75°	1524.3	1103.1	190.3	176.2	168.5	251.5	347.3	289.9	245.1	222.2	217.0
77.5°	707.2	474.9	162.1	155.8	146.9	236.2	335.7	274.5	231.0	209.3	202.9
80°	329.4	224.7	136.6	135.4	131.5	223.4	320.4	256.6	214.4	196.5	186.4
82.5°	176.2	135.4	111.1	111.1	115.0	208.0	301.3	234.8	192.7	183.9	157.1
85°	93.2	77.9	80.4	86.9	98.4	183.9	275.8	211.9	168.5	140.4	136.6
87.5°	47.3	49.8	49.8	58.7	75.3	149.4	227.2	174.9	143.0	115.0	112.4
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)