

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: P234742

Luminaire Tested: **ARCH-AF16-60-D-U-T4W-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234742
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-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 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: 5199 lumens
Efficiency: N/A
Efficacy: 82.5 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): 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

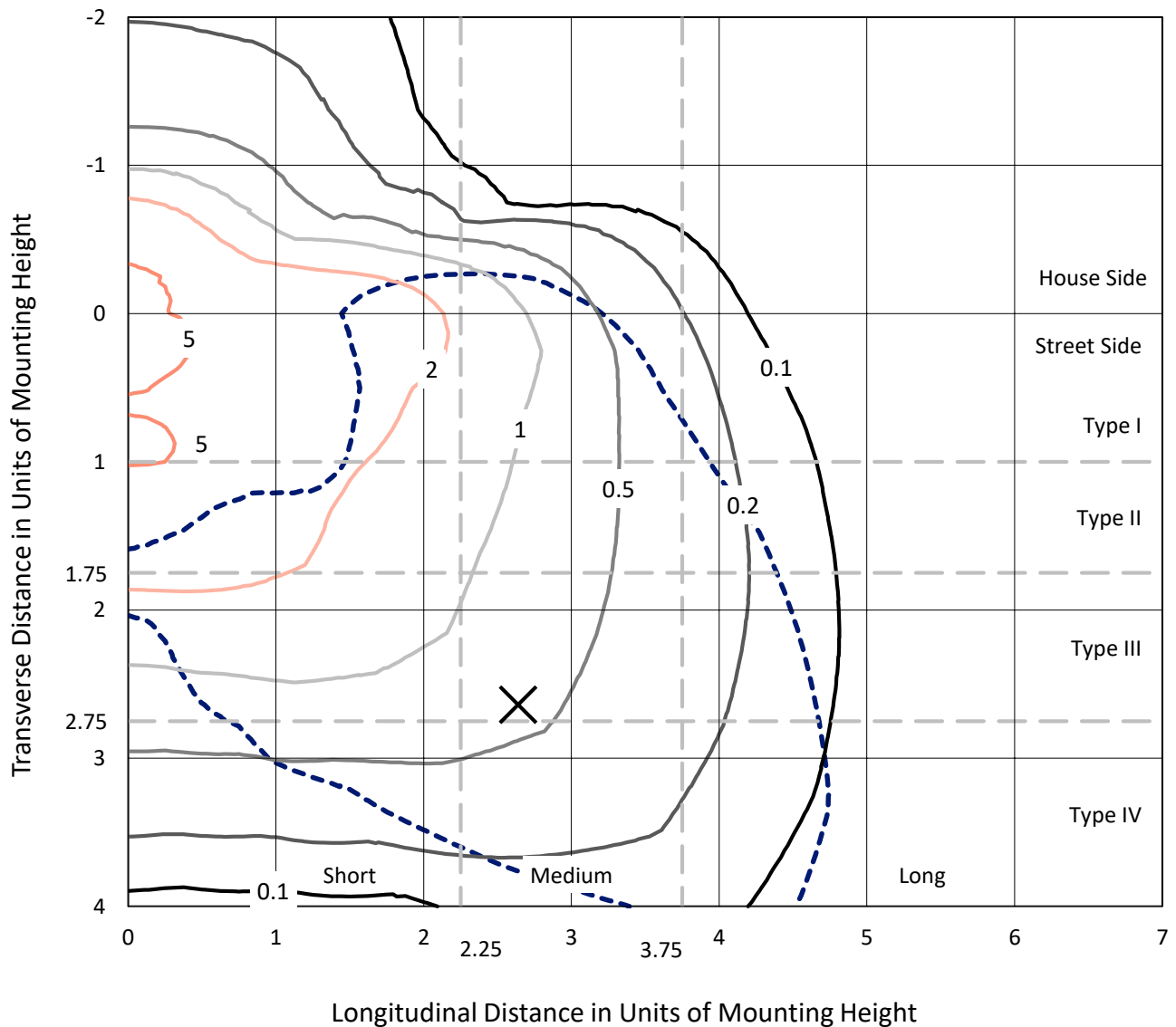


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

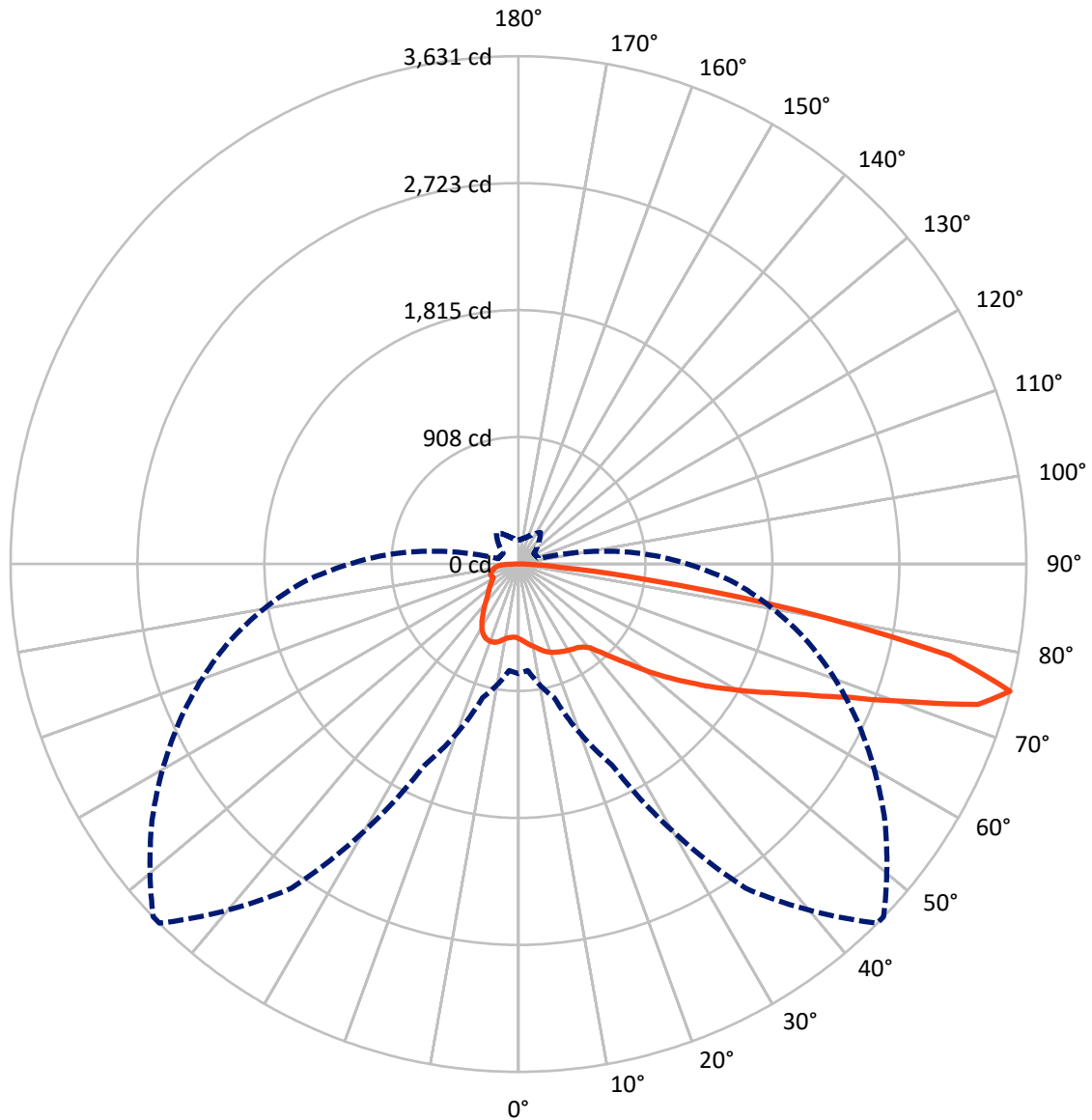


Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Medium - Non-Cutoff

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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	1204.4	0.0	1204.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	3994.6	0.0	3994.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	5199.0	0.0	5199.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	1.0
10°-20°	171.2	3.3
20°-30°	293.7	5.6
30°-40°	410.8	7.9
40°-50°	602.6	11.6
50°-60°	938.7	18.1
60°-70°	1350.7	26.0
70°-80°	1176.6	22.6
80°-90°	202.1	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°	5199.0	100.0
0°-180°	5199.0	100.0

Coefficient of Utilization



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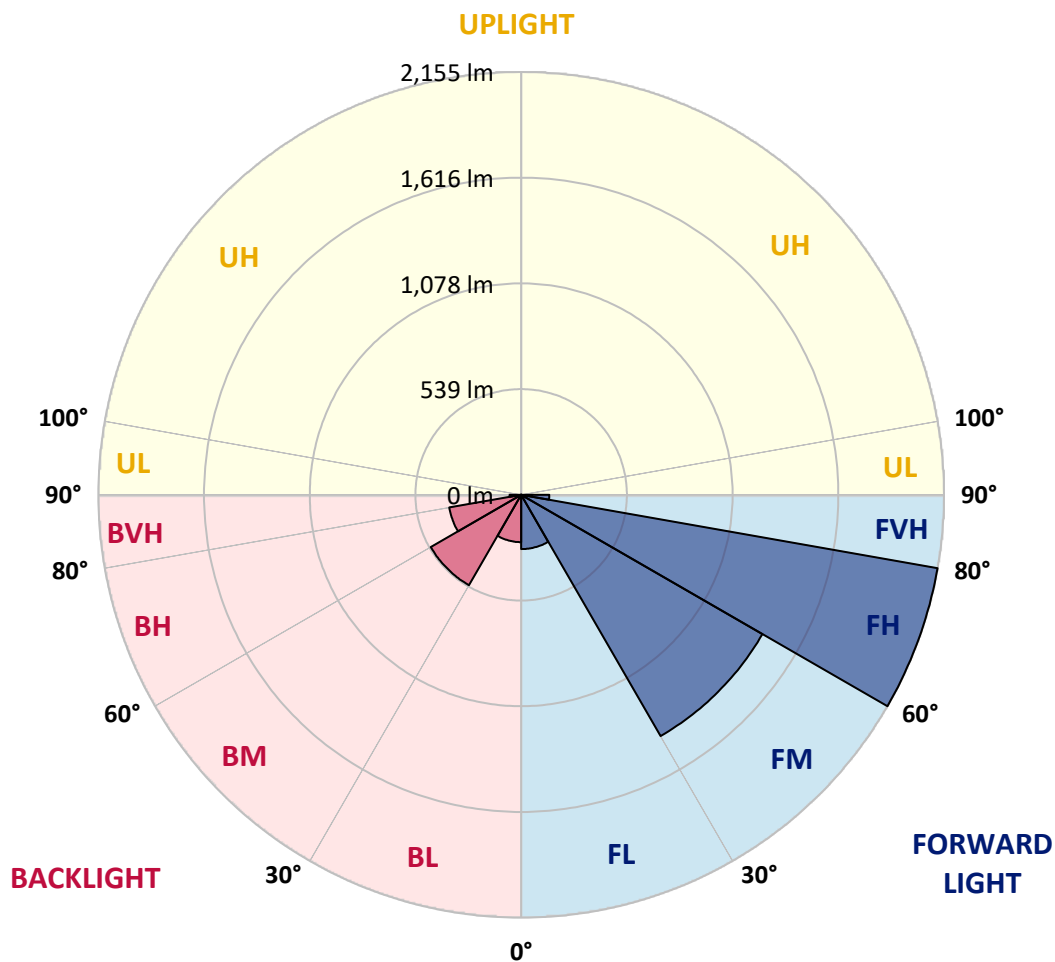
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	276.5	5.3			
FM	(30°-60°)	1419.7	27.3			
FH	(60°-80°)	2155.0	41.5			G2/5000
FVH	(80°-90°)	143.4	2.8			G2/225
BL	(0°-30°)	241.2	4.6	B1/500		
BM	(30°-60°)	532.3	10.2	B1/1000		
BH	(60°-80°)	372.2	7.2	B1/500		G1/500
BVH	(80°-90°)	58.7	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°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	559.3	555.2	555.2	552.2	552.2	547.1	545.1	544.1	539.0	536.0	533.0
5°	591.6	586.6	585.6	578.5	575.4	564.3	563.3	556.2	547.1	538.0	530.9
7.5°	621.0	617.9	612.9	605.8	596.7	582.5	581.5	570.4	555.2	543.1	533.0
10°	642.2	640.2	633.1	624.0	613.9	599.7	598.7	586.6	568.4	554.2	540.1
12.5°	667.5	664.4	655.3	643.2	632.1	618.9	617.9	607.8	587.6	569.4	551.2
15°	691.8	687.7	676.6	664.4	652.3	641.2	641.2	630.1	608.8	587.6	566.3
17.5°	703.9	701.9	690.7	677.6	667.5	659.4	658.4	648.3	627.0	604.8	581.5
20°	707.9	708.9	698.8	684.7	677.6	673.5	672.5	665.5	642.2	621.0	598.7
22.5°	706.9	710.0	701.9	686.7	684.7	684.7	684.7	676.6	658.4	637.1	614.9
25°	711.0	715.0	708.9	690.7	690.7	694.8	694.8	690.7	674.6	656.4	634.1
27.5°	725.1	728.2	723.1	697.8	698.8	704.9	703.9	704.9	694.8	677.6	655.3
30°	742.3	746.4	740.3	708.9	707.9	714.0	714.0	719.1	712.0	693.8	675.6
32.5°	788.8	787.8	768.6	721.1	718.0	724.1	724.1	729.2	725.1	711.0	693.8
35°	927.4	912.2	869.7	760.5	730.2	733.2	733.2	742.3	744.3	733.2	718.0
37.5°	1069.0	1063.9	1031.6	865.7	774.7	752.4	751.4	764.6	773.7	764.6	754.5
40°	1211.6	1207.5	1200.4	1006.3	867.7	786.8	783.8	794.9	811.1	805.0	799.0
42.5°	1344.1	1342.0	1349.1	1144.8	986.0	860.6	851.5	838.4	861.7	859.6	859.6
45°	1448.2	1453.3	1457.3	1274.3	1114.5	955.7	944.6	900.1	931.4	939.5	945.6
47.5°	1506.9	1510.9	1525.1	1400.7	1242.9	1065.9	1057.9	985.0	1026.5	1050.8	1068.0
50°	1590.8	1579.7	1591.8	1524.1	1397.7	1209.6	1187.3	1099.3	1151.9	1194.4	1234.8
52.5°	1671.7	1653.5	1663.6	1666.7	1573.6	1350.1	1326.9	1233.8	1299.6	1366.3	1438.1
55°	1744.5	1743.5	1753.6	1805.2	1743.5	1500.8	1474.5	1382.5	1477.6	1549.4	1670.7
57.5°	1803.2	1813.3	1857.8	1966.0	1939.7	1664.7	1635.3	1555.4	1667.7	1739.5	1940.7
60°	1872.0	1888.2	1962.0	2102.6	2118.7	1836.6	1806.2	1748.6	1862.9	1935.7	2253.2
62.5°	1895.2	1918.5	2070.2	2246.2	2305.8	2024.7	1997.4	1958.9	2068.2	2133.9	2564.7
65°	1740.5	1785.0	2129.9	2320.0	2507.1	2251.2	2228.0	2194.6	2272.5	2315.9	2776.1
67.5°	1698.0	1718.3	2013.6	2426.2	2696.2	2542.5	2519.2	2461.6	2463.6	2445.4	2844.9
70°	1638.4	1660.6	1894.2	2506.1	2967.2	2940.9	2912.6	2742.7	2638.6	2528.3	2709.4
72.5°	1395.6	1388.6	1632.3	2290.7	3097.7	3434.5	3401.1	3045.1	2768.0	2456.5	2286.6
75°	783.8	763.6	990.1	1584.8	2828.7	3630.7	3629.7	3197.8	2677.0	2140.0	1556.4
77.5°	227.5	221.5	326.7	664.4	1904.3	3154.3	3192.8	2884.3	2234.0	1537.2	854.6
80°	107.2	109.2	140.6	219.5	813.1	2035.8	2146.0	1899.3	1335.0	708.9	353.0
82.5°	67.8	68.8	96.1	141.6	343.9	924.4	1015.4	854.6	528.9	306.4	155.7
85°	42.5	42.5	63.7	93.0	205.3	295.3	320.6	291.3	226.5	166.9	85.0
87.5°	23.3	23.3	38.4	53.6	112.3	95.1	98.1	116.3	141.6	102.1	42.5
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°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	532.0	529.9	526.9	525.9	524.9	523.9	524.9	526.9	524.9	524.9	525.9
5°	528.9	526.9	522.9	522.9	523.9	524.9	529.9	533.0	534.0	534.0	534.0
7.5°	528.9	525.9	522.9	523.9	525.9	529.9	538.0	543.1	547.1	548.1	548.1
10°	534.0	529.9	527.9	529.9	536.0	539.0	547.1	555.2	560.3	562.3	562.3
12.5°	543.1	539.0	539.0	543.1	551.2	555.2	562.3	568.4	574.4	577.5	577.5
15°	558.3	553.2	554.2	561.3	570.4	574.4	579.5	581.5	586.6	590.6	590.6
17.5°	572.4	567.4	569.4	577.5	583.5	585.6	588.6	587.6	589.6	592.6	593.7
20°	588.6	583.5	584.5	589.6	590.6	588.6	588.6	585.6	584.5	589.6	591.6
22.5°	604.8	599.7	598.7	595.7	590.6	585.6	582.5	579.5	577.5	582.5	584.5
25°	624.0	616.9	611.9	598.7	585.6	576.5	572.4	570.4	569.4	574.4	576.5
27.5°	645.2	638.1	623.0	594.7	573.4	558.3	555.2	555.2	557.2	560.3	562.3
30°	665.5	658.4	631.1	585.6	552.2	529.9	526.9	529.9	535.0	538.0	541.1
32.5°	685.7	678.6	636.1	571.4	520.8	492.5	490.5	495.6	503.6	505.7	507.7
35°	713.0	705.9	642.2	551.2	481.4	451.1	449.0	452.1	459.1	462.2	465.2
37.5°	751.4	747.4	651.3	528.9	445.0	411.6	405.5	403.5	407.6	406.6	410.6
40°	802.0	805.0	667.5	499.6	409.6	375.2	362.1	356.0	351.9	343.9	347.9
42.5°	875.8	877.8	685.7	466.2	379.2	340.8	323.6	312.5	304.4	291.3	293.3
45°	984.0	966.8	706.9	430.8	351.9	313.5	293.3	280.1	269.0	257.9	258.9
47.5°	1127.6	1075.0	730.2	401.5	324.6	291.3	273.1	257.9	244.7	235.6	236.7
50°	1304.6	1209.6	753.4	374.2	297.3	274.1	257.9	241.7	228.6	219.5	218.4
52.5°	1538.2	1371.4	768.6	343.9	270.0	258.9	244.7	229.6	213.4	202.3	201.3
55°	1781.0	1559.5	781.8	307.4	243.7	241.7	234.6	217.4	198.2	184.1	182.0
57.5°	2047.9	1760.7	791.9	272.0	223.5	227.5	225.5	205.3	184.1	170.9	169.9
60°	2290.7	1969.1	759.5	240.7	205.3	213.4	215.4	198.2	187.1	190.1	191.1
62.5°	2535.4	2129.9	636.1	217.4	193.2	204.3	221.5	220.5	215.4	220.5	221.5
65°	2623.4	2163.2	451.1	198.2	181.0	208.3	240.7	238.7	215.4	206.3	204.3
67.5°	2573.8	2064.1	303.4	183.1	171.9	213.4	260.9	238.7	207.3	195.2	191.1
70°	2338.2	1820.4	222.5	167.9	163.8	212.4	272.0	237.7	203.3	190.1	185.1
72.5°	1864.9	1404.7	179.0	153.7	151.7	207.3	278.1	235.6	199.2	185.1	179.0
75°	1207.5	873.8	150.7	139.6	133.5	199.2	275.1	229.6	194.2	176.0	171.9
77.5°	560.3	376.2	128.4	123.4	116.3	187.1	266.0	217.4	183.1	165.9	160.8
80°	260.9	178.0	108.2	107.2	104.2	177.0	253.8	203.3	169.9	155.7	147.7
82.5°	139.6	107.2	88.0	88.0	91.0	164.8	238.7	186.1	152.7	145.6	124.4
85°	73.8	61.7	63.7	68.8	77.9	145.6	218.4	167.9	133.5	111.2	108.2
87.5°	37.4	39.4	39.4	46.5	59.7	118.3	180.0	138.6	113.3	91.0	89.0
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)