

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: P214883

Luminaire Tested: **ARCH-AF24-40-D-U-T4W-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214883  
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-AF24-40-D-U-T4W-7050  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5102 lumens  
Efficiency: N/A  
Efficacy: 127.5 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): 40  
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

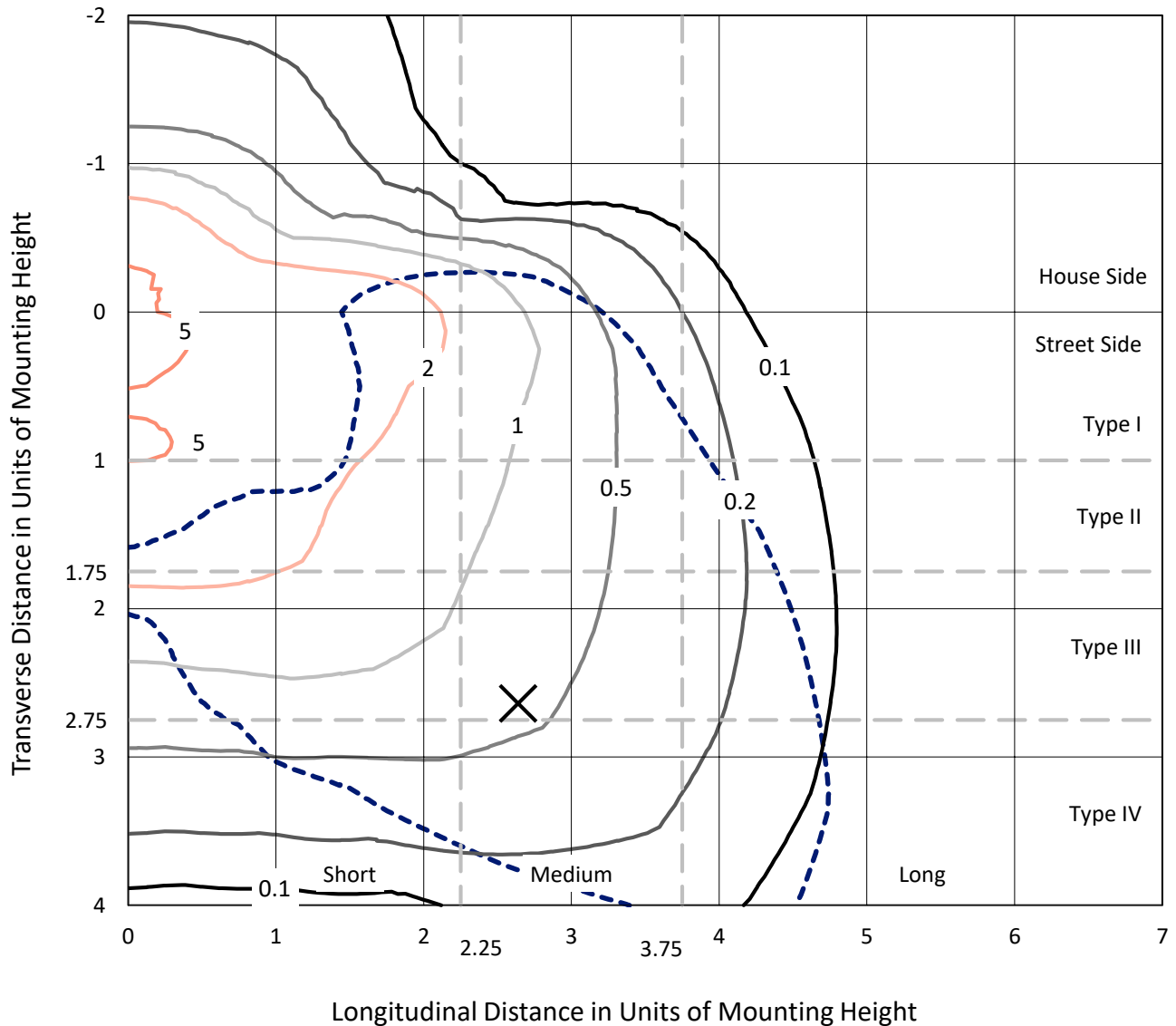


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

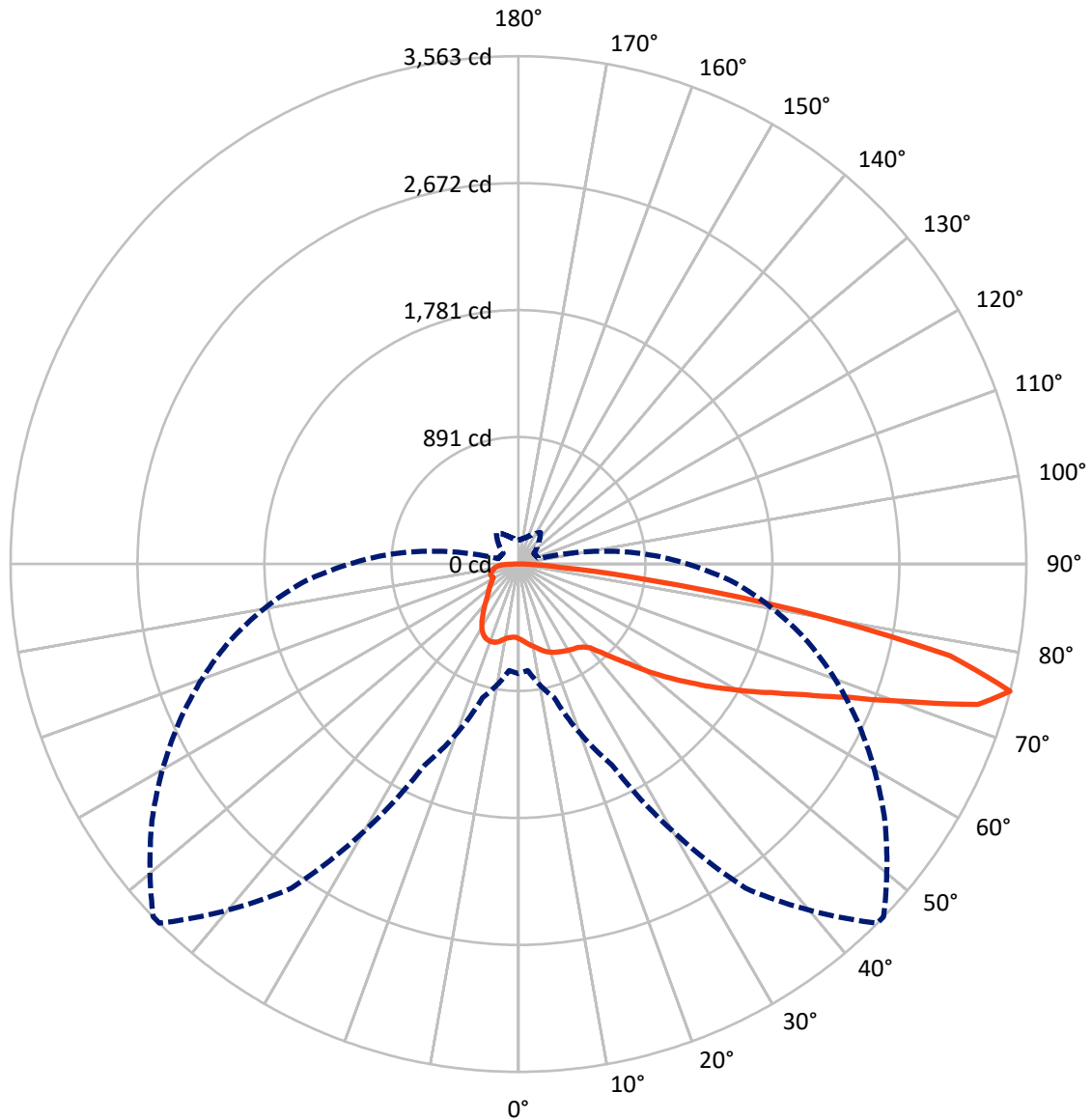


Based on 10 foot mounting height. Maximum calculated value = 6.1 fc  
 Type IV - Medium - Non-Cutoff

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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
<b>House Side</b>	Lumens	1181.9	0.0	1181.9
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	3920.1	0.0	3920.1
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	5102.0	0.0	5102.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.8	1.0
10°-20°	168.0	3.3
20°-30°	288.2	5.6
30°-40°	403.1	7.9
40°-50°	591.3	11.6
50°-60°	921.1	18.1
60°-70°	1325.5	26.0
70°-80°	1154.6	22.6
80°-90°	198.3	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°	5102.0	100.0
0°-180°	5102.0	100.0



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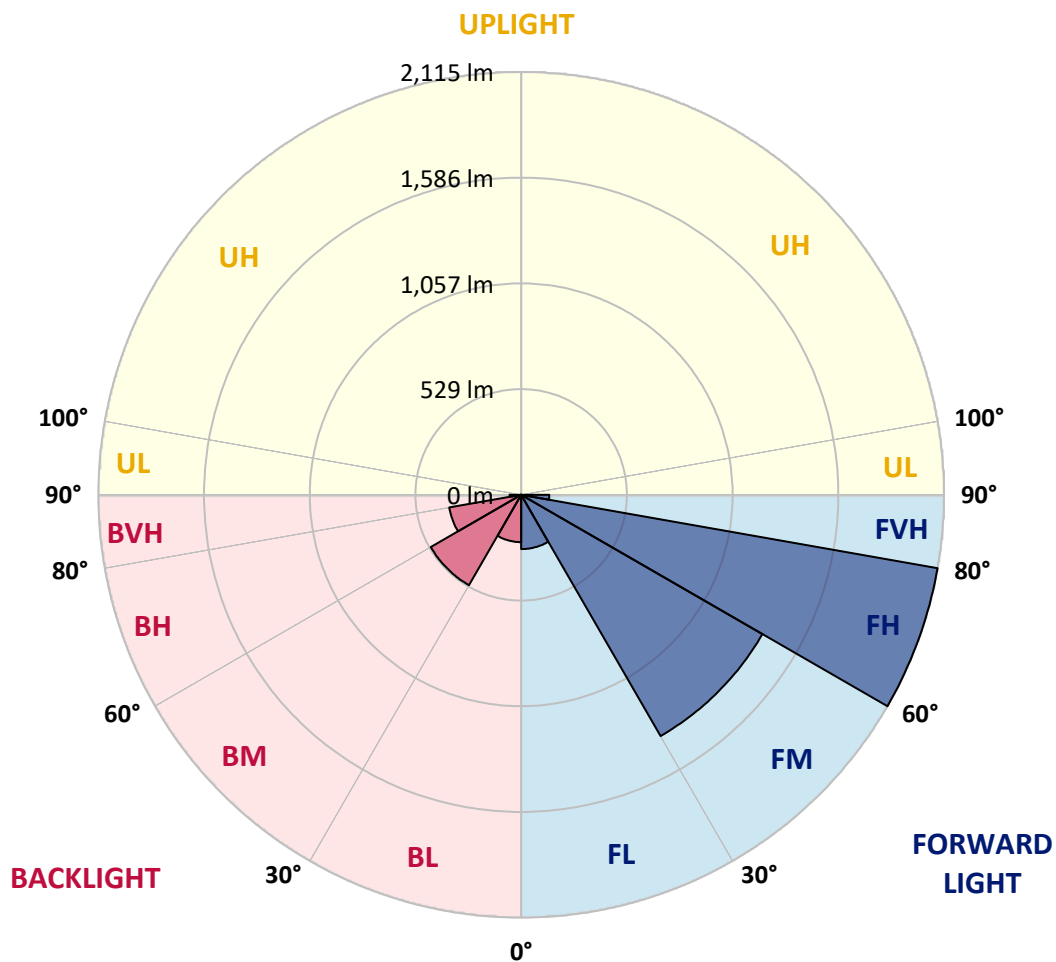
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	271.3	5.3			
FM	(30°-60°)	1393.3	27.3			
FH	(60°-80°)	2114.8	41.5			G2/5000
FVH	(80°-90°)	140.7	2.8			G2/225
BL	(0°-30°)	236.7	4.6	B1/500		
BM	(30°-60°)	522.3	10.2	B1/1000		
BH	(60°-80°)	365.2	7.2	B1/500		G1/500
BVH	(80°-90°)	57.6	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°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	548.8	544.9	544.9	541.9	541.9	536.9	534.9	533.9	529.0	526.0	523.0
5°	580.6	575.6	574.6	567.7	564.7	553.8	552.8	545.9	536.9	528.0	521.0
7.5°	609.4	606.4	601.4	594.5	585.6	571.7	570.7	559.7	544.9	533.0	523.0
10°	630.2	628.2	621.3	612.3	602.4	588.5	587.5	575.6	557.8	543.9	530.0
12.5°	655.0	652.0	643.1	631.2	620.3	607.4	606.4	596.5	576.6	558.8	540.9
15°	678.8	674.9	664.0	652.0	640.1	629.2	629.2	618.3	597.5	576.6	555.8
17.5°	690.8	688.8	677.9	664.9	655.0	647.1	646.1	636.2	615.3	593.5	570.7
20°	694.7	695.7	685.8	671.9	664.9	661.0	660.0	653.0	630.2	609.4	587.5
22.5°	693.7	696.7	688.8	673.9	671.9	671.9	671.9	664.0	646.1	625.3	603.4
25°	697.7	701.7	695.7	677.9	677.9	681.8	681.8	677.9	662.0	644.1	622.3
27.5°	711.6	714.6	709.6	684.8	685.8	691.7	690.8	691.7	681.8	664.9	643.1
30°	728.5	732.4	726.5	695.7	694.7	700.7	700.7	705.6	698.7	680.8	663.0
32.5°	774.1	773.1	754.3	707.6	704.6	710.6	710.6	715.6	711.6	697.7	680.8
35°	910.1	895.2	853.5	746.3	716.6	719.5	719.5	728.5	730.5	719.5	704.6
37.5°	1049.0	1044.1	1012.3	849.5	760.2	738.4	737.4	750.3	759.2	750.3	740.4
40°	1189.0	1185.0	1178.1	987.5	851.5	772.1	769.2	780.1	796.0	790.0	784.0
42.5°	1319.0	1317.0	1323.9	1123.5	967.7	844.6	835.7	822.8	845.6	843.6	843.6
45°	1421.2	1426.2	1430.1	1250.5	1093.7	937.9	927.0	883.3	914.1	922.0	928.0
47.5°	1478.8	1482.7	1496.6	1374.6	1219.7	1046.1	1038.1	966.7	1007.3	1031.2	1048.0
50°	1561.1	1550.2	1562.1	1495.6	1371.6	1187.0	1165.2	1078.8	1130.4	1172.1	1211.8
52.5°	1640.5	1622.7	1632.6	1635.6	1544.3	1324.9	1302.1	1210.8	1275.3	1340.8	1411.3
55°	1712.0	1711.0	1720.9	1771.5	1711.0	1472.8	1447.0	1356.7	1450.0	1520.5	1639.5
57.5°	1769.6	1779.5	1823.2	1929.3	1903.5	1633.6	1604.8	1526.4	1636.6	1707.0	1904.5
60°	1837.0	1852.9	1925.4	2063.3	2079.2	1802.3	1772.5	1716.0	1828.1	1899.6	2211.2
62.5°	1859.9	1882.7	2031.6	2204.3	2262.8	1986.9	1960.1	1922.4	2029.6	2094.1	2516.9
65°	1708.0	1751.7	2090.1	2276.7	2460.3	2209.2	2186.4	2153.6	2230.1	2272.7	2724.3
67.5°	1666.3	1686.2	1976.0	2380.9	2645.9	2495.0	2472.2	2415.7	2417.6	2399.8	2791.8
70°	1607.8	1629.6	1858.9	2459.3	2911.9	2886.1	2858.3	2691.6	2589.3	2481.2	2658.8
72.5°	1369.6	1362.7	1601.8	2247.9	3039.9	3370.4	3337.6	2988.3	2716.4	2410.7	2244.0
75°	769.2	749.3	971.6	1555.2	2775.9	3562.9	3561.9	3138.2	2627.0	2100.0	1527.4
77.5°	223.3	217.3	320.6	652.0	1868.8	3095.5	3133.2	2830.5	2192.3	1508.5	838.6
80°	105.2	107.2	138.0	215.4	797.9	1997.8	2106.0	1863.8	1310.0	695.7	346.4
82.5°	66.5	67.5	94.3	138.9	337.4	907.1	996.4	838.6	519.1	300.7	152.8
85°	41.7	41.7	62.5	91.3	201.5	289.8	314.6	285.8	222.3	163.8	83.4
87.5°	22.8	22.8	37.7	52.6	110.2	93.3	96.3	114.1	138.9	100.2	41.7
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°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	522.0	520.1	517.1	516.1	515.1	514.1	515.1	517.1	515.1	515.1	516.1
5°	519.1	517.1	513.1	513.1	514.1	515.1	520.1	523.0	524.0	524.0	524.0
7.5°	519.1	516.1	513.1	514.1	516.1	520.1	528.0	533.0	536.9	537.9	537.9
10°	524.0	520.1	518.1	520.1	526.0	529.0	536.9	544.9	549.8	551.8	551.8
12.5°	533.0	529.0	529.0	533.0	540.9	544.9	551.8	557.8	563.7	566.7	566.7
15°	547.8	542.9	543.9	550.8	559.7	563.7	568.7	570.7	575.6	579.6	579.6
17.5°	561.7	556.8	558.8	566.7	572.7	574.6	577.6	576.6	578.6	581.6	582.6
20°	577.6	572.7	573.6	578.6	579.6	577.6	577.6	574.6	573.6	578.6	580.6
22.5°	593.5	588.5	587.5	584.6	579.6	574.6	571.7	568.7	566.7	571.7	573.6
25°	612.3	605.4	600.4	587.5	574.6	565.7	561.7	559.7	558.8	563.7	565.7
27.5°	633.2	626.2	611.4	583.6	562.7	547.8	544.9	544.9	546.8	549.8	551.8
30°	653.0	646.1	619.3	574.6	541.9	520.1	517.1	520.1	525.0	528.0	531.0
32.5°	672.9	665.9	624.3	560.7	511.1	483.3	481.3	486.3	494.2	496.2	498.2
35°	699.7	692.7	630.2	540.9	472.4	442.6	440.7	443.6	450.6	453.6	456.5
37.5°	737.4	733.4	639.1	519.1	436.7	403.9	398.0	396.0	400.0	399.0	402.9
40°	787.0	790.0	655.0	490.3	401.9	368.2	355.3	349.3	345.4	337.4	341.4
42.5°	859.5	861.5	672.9	457.5	372.2	334.5	317.6	306.7	298.7	285.8	287.8
45°	965.7	948.8	693.7	422.8	345.4	307.7	287.8	274.9	264.0	253.1	254.1
47.5°	1106.6	1055.0	716.6	394.0	318.6	285.8	268.0	253.1	240.2	231.2	232.2
50°	1280.3	1187.0	739.4	367.2	291.8	269.0	253.1	237.2	224.3	215.4	214.4
52.5°	1509.5	1345.8	754.3	337.4	265.0	254.1	240.2	225.3	209.4	198.5	197.5
55°	1747.7	1530.4	767.2	301.7	239.2	237.2	230.3	213.4	194.5	180.6	178.6
57.5°	2009.7	1727.9	777.1	267.0	219.3	223.3	221.3	201.5	180.6	167.7	166.7
60°	2247.9	1932.3	745.3	236.2	201.5	209.4	211.4	194.5	183.6	186.6	187.6
62.5°	2488.1	2090.1	624.3	213.4	189.6	200.5	217.3	216.4	211.4	216.4	217.3
65°	2574.4	2122.9	442.6	194.5	177.7	204.4	236.2	234.2	211.4	202.5	200.5
67.5°	2525.8	2025.6	297.7	179.6	168.7	209.4	256.1	234.2	203.5	191.5	187.6
70°	2294.6	1786.4	218.3	164.7	160.8	208.4	267.0	233.2	199.5	186.6	181.6
72.5°	1830.1	1378.5	175.7	150.9	148.9	203.5	272.9	231.2	195.5	181.6	175.7
75°	1185.0	857.5	147.9	137.0	131.0	195.5	269.9	225.3	190.6	172.7	168.7
77.5°	549.8	369.2	126.0	121.1	114.1	183.6	261.0	213.4	179.6	162.8	157.8
80°	256.1	174.7	106.2	105.2	102.2	173.7	249.1	199.5	166.7	152.8	144.9
82.5°	137.0	105.2	86.3	86.3	89.3	161.8	234.2	182.6	149.9	142.9	122.1
85°	72.4	60.5	62.5	67.5	76.4	142.9	214.4	164.7	131.0	109.2	106.2
87.5°	36.7	38.7	38.7	45.7	58.6	116.1	176.7	136.0	111.2	89.3	87.3
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)