

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: P348648

Luminaire Tested: **ARCH-N-PA1-30-730-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348648  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-30-730-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3994 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 31  
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

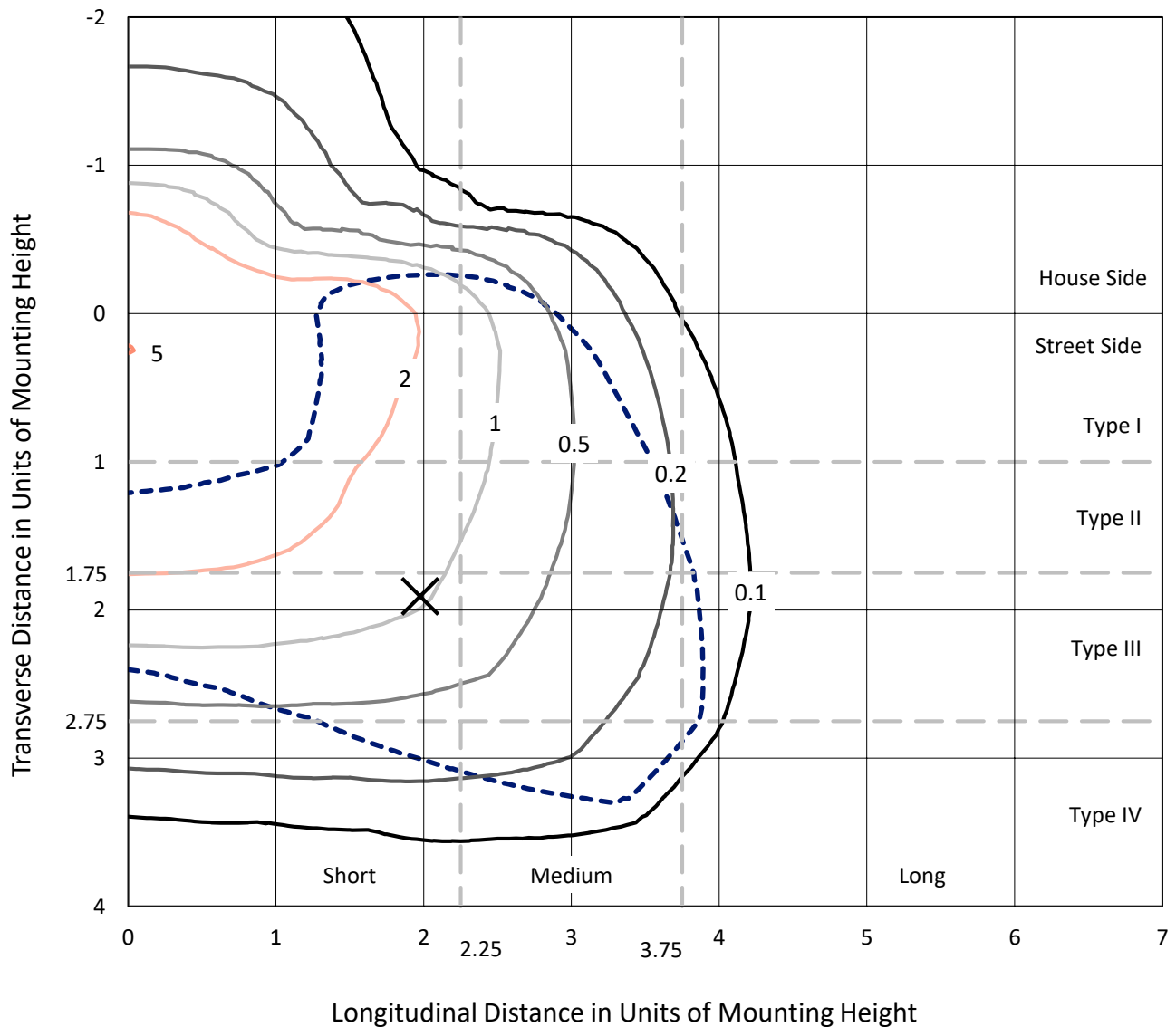


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### Iso-Footcandle Lines of Horizontal Illumination

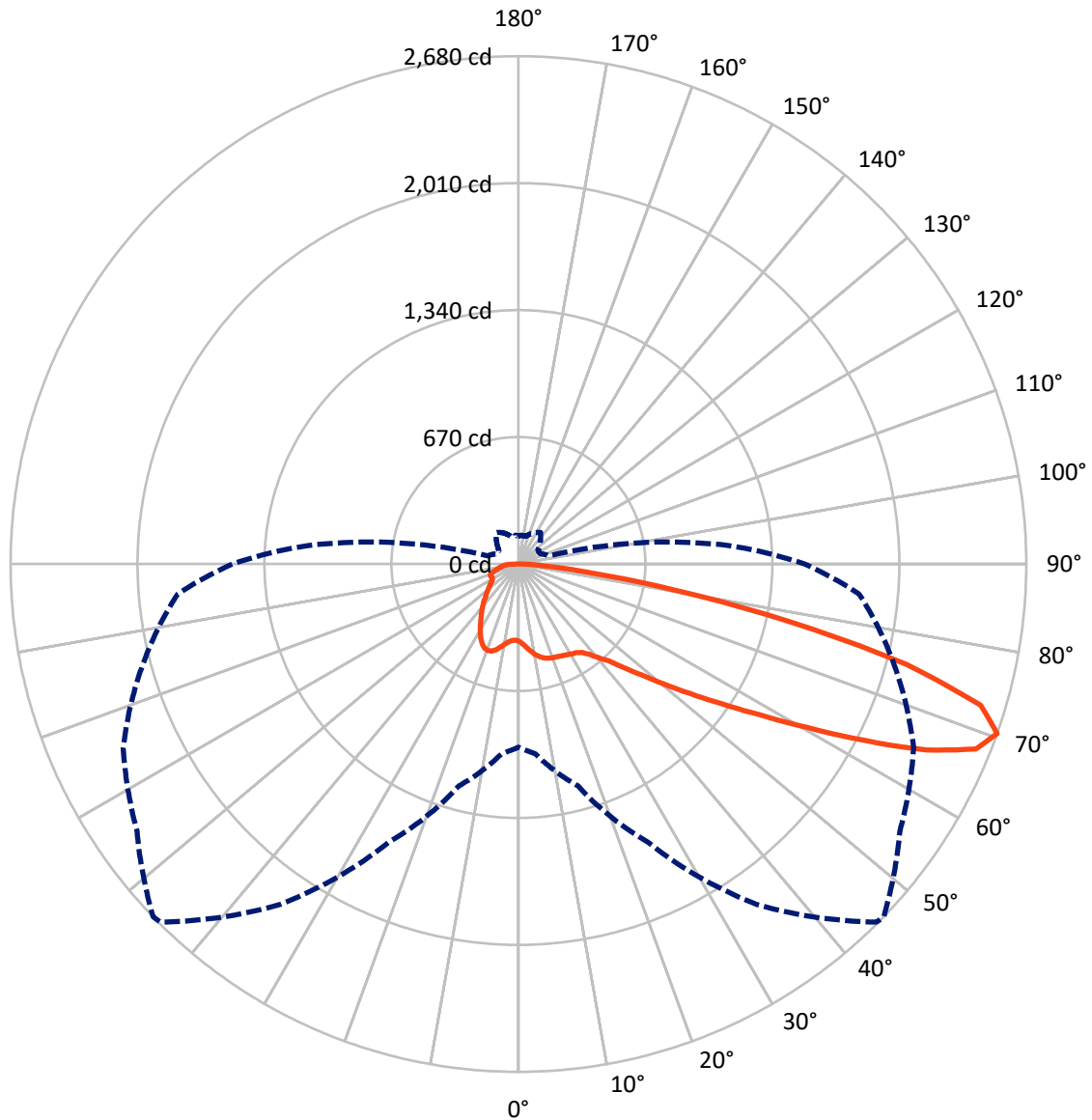
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.1 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	915.4	0.0	915.4
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	3078.6	0.0	3078.6
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	3994.0	0.0	3994.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.5	1.0
10°-20°	138.2	3.5
20°-30°	230.4	5.8
30°-40°	327.0	8.2
40°-50°	481.0	12.0
50°-60°	814.6	20.4
60°-70°	1156.3	29.0
70°-80°	702.5	17.6
80°-90°	102.5	2.6
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°	3994.0	100.0
0°-180°	3994.0	100.0

**Coefficient of Utilization**



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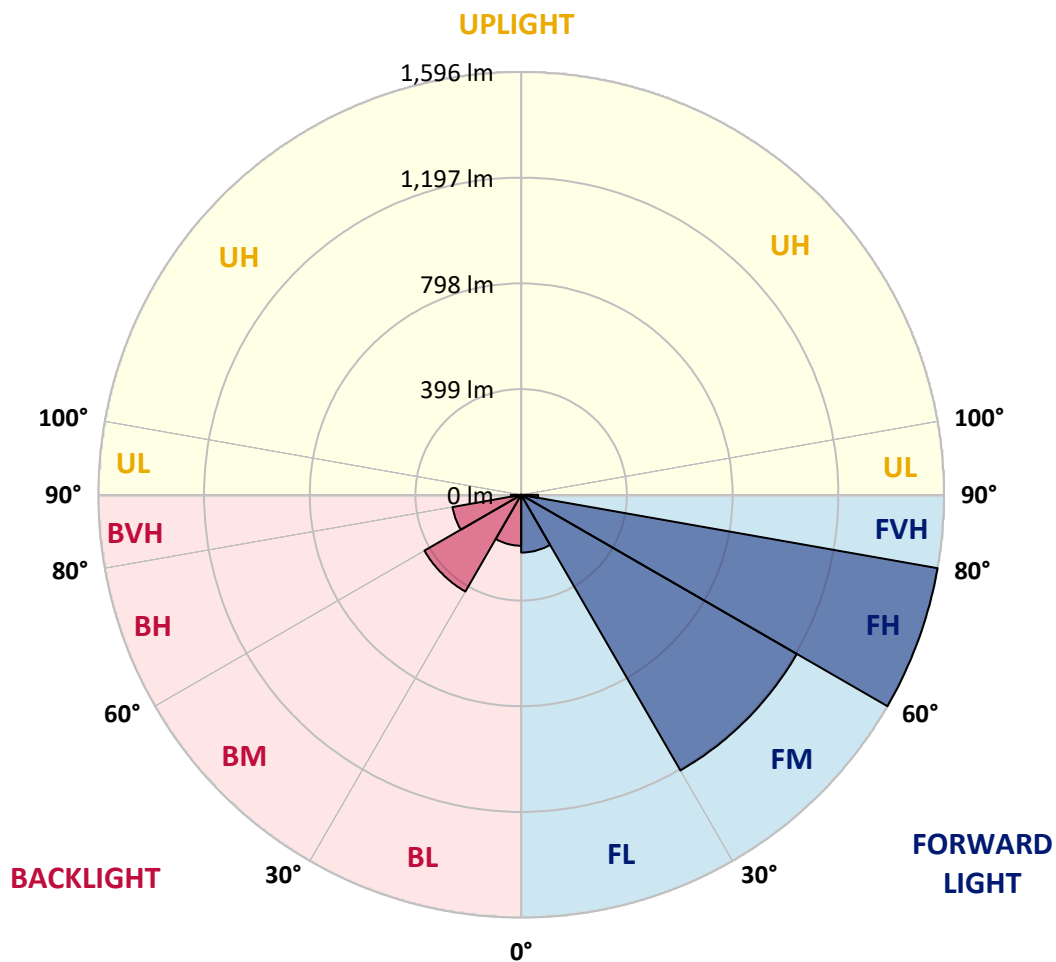
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	217.9	5.5			
FM	(30°-60°)	1201.2	30.1			
FH	(60°-80°)	1595.6	39.9			G1/1800
FVH	(80°-90°)	63.9	1.6			G1/100
BL	(0°-30°)	192.2	4.8	B1/500		
BM	(30°-60°)	421.4	10.6	B1/1000		
BH	(60°-80°)	263.2	6.6	B1/500		G1/500
BVH	(80°-90°)	38.7	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9
2.5°	427.3	427.5	428.1	426.7	422.9	421.8	421.4	417.4	414.8	411.0	407.7
5°	461.4	461.7	460.9	457.1	448.6	442.3	441.8	432.7	424.5	415.8	409.2
7.5°	497.1	497.5	494.9	487.7	475.8	464.9	464.2	451.9	439.4	426.2	416.3
10°	528.7	527.1	522.8	512.7	498.6	485.2	484.7	471.8	457.5	441.5	428.4
12.5°	549.7	548.4	542.9	530.6	515.2	502.9	501.8	489.9	475.9	458.4	442.7
15°	561.4	562.3	554.9	541.0	526.0	515.6	514.6	506.1	493.7	476.1	458.0
17.5°	562.9	563.7	556.6	542.8	530.5	523.4	523.0	517.4	508.3	491.4	472.5
20°	554.1	554.7	548.8	537.4	529.4	527.2	527.1	524.6	517.9	502.9	484.5
22.5°	541.4	541.8	537.6	529.4	526.6	530.1	531.0	530.1	525.3	511.2	494.0
25°	538.3	538.0	533.6	525.3	527.6	534.8	536.1	536.5	533.2	520.9	506.0
27.5°	553.4	552.5	544.1	530.7	532.3	541.0	542.6	546.6	544.6	533.8	519.7
30°	597.3	595.7	578.6	551.5	544.1	548.7	550.7	557.0	557.4	548.4	537.9
32.5°	671.4	669.3	638.7	590.3	564.2	556.4	558.4	567.8	572.8	565.9	554.5
35°	765.0	762.7	722.5	656.4	597.9	571.3	572.7	580.2	590.3	580.5	565.5
37.5°	862.6	857.0	818.3	734.0	651.3	603.2	603.2	604.1	608.9	588.4	578.3
40°	959.7	954.1	919.1	825.3	720.5	653.4	650.2	629.0	625.2	607.6	604.1
42.5°	1049.9	1048.2	1027.6	928.5	801.7	702.7	698.3	662.4	663.2	652.3	652.4
45°	1145.8	1145.8	1129.0	1032.7	896.2	782.0	777.6	724.7	732.9	727.8	740.0
47.5°	1224.1	1226.6	1224.3	1141.2	1006.3	882.7	874.8	811.1	834.1	851.4	886.8
50°	1304.1	1307.9	1308.3	1260.2	1139.3	1002.4	993.4	925.8	977.0	1026.8	1096.3
52.5°	1420.2	1428.8	1394.5	1379.0	1302.2	1144.6	1135.7	1073.2	1158.8	1228.7	1348.5
55°	1527.7	1520.2	1495.7	1505.3	1476.6	1306.4	1299.7	1244.9	1361.4	1452.1	1607.8
57.5°	1586.0	1585.4	1610.0	1651.0	1664.7	1506.0	1500.4	1447.1	1589.8	1658.0	1851.3
60°	1654.3	1655.3	1716.2	1809.3	1865.6	1754.5	1752.0	1711.6	1811.6	1850.2	2042.2
62.5°	1663.9	1681.1	1786.1	1946.3	2053.7	2044.8	2050.3	1949.8	2010.1	2003.5	2184.8
65°	1553.8	1576.5	1766.5	1987.7	2240.7	2362.3	2367.4	2189.4	2166.6	2134.6	2235.8
67.5°	1328.3	1361.9	1568.3	1897.6	2302.3	2597.0	2604.1	2375.2	2296.4	2179.0	2113.0
70°	966.6	1003.9	1211.7	1620.7	2192.4	2672.0	2680.1	2457.3	2301.4	2052.6	1803.8
72.5°	583.9	613.2	784.4	1193.1	1850.4	2535.4	2549.7	2353.2	2101.1	1738.6	1332.0
75°	256.4	275.6	379.3	687.5	1324.7	2097.7	2115.6	2014.2	1707.2	1263.5	787.3
77.5°	109.2	114.7	155.5	298.7	748.9	1433.4	1458.0	1471.7	1158.3	687.5	332.7
80°	68.1	70.3	88.0	135.2	350.5	805.1	831.6	865.9	575.2	252.7	116.2
82.5°	41.4	43.9	58.5	81.7	182.5	364.9	377.7	401.9	223.2	109.2	60.1
85°	24.9	26.7	35.8	51.7	103.9	143.5	143.4	158.6	105.1	70.3	31.7
87.5°	11.9	13.3	19.1	26.8	52.4	53.9	50.4	57.1	63.8	46.1	16.0
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°	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9
2.5°	406.6	406.1	404.3	402.9	402.7	401.9	401.2	401.6	402.1	402.3	402.3
5°	406.5	405.0	402.7	401.7	402.9	404.6	406.6	409.4	411.0	412.2	413.1
7.5°	413.1	410.2	407.6	407.0	409.5	413.9	418.5	424.3	428.2	431.0	431.5
10°	424.0	420.4	417.8	418.4	422.8	429.1	435.6	443.0	449.0	452.7	453.0
12.5°	436.6	433.2	430.7	433.0	440.3	447.9	454.8	461.2	466.6	470.3	470.3
15°	451.1	448.6	445.7	451.1	460.9	467.7	470.6	473.7	476.8	479.5	478.9
17.5°	465.0	462.7	461.2	467.5	477.7	480.9	478.9	476.6	476.6	478.1	478.4
20°	477.0	475.0	475.9	482.1	487.4	484.1	477.0	469.6	466.6	467.5	468.3
22.5°	487.6	486.6	489.5	492.3	488.5	477.0	463.9	453.9	450.2	450.0	450.2
25°	499.9	499.7	503.3	498.1	481.1	459.9	442.3	432.6	430.6	432.2	434.9
27.5°	515.2	516.7	518.4	499.4	466.1	434.1	416.2	409.5	411.6	415.5	418.1
30°	534.7	538.8	535.0	496.0	444.5	404.6	387.5	385.6	391.2	396.8	399.5
32.5°	553.7	560.1	550.8	487.1	416.6	373.3	360.0	359.5	366.3	371.8	375.6
35°	569.0	581.7	562.7	469.5	384.4	344.4	334.7	331.1	333.5	339.9	344.3
37.5°	589.0	610.2	570.9	442.6	349.4	320.7	309.3	300.8	298.7	301.3	303.4
40°	625.5	653.5	574.8	405.0	315.2	296.9	285.4	273.0	264.3	258.1	258.2
42.5°	685.1	709.9	572.3	359.3	283.6	273.6	260.7	246.3	232.4	218.1	217.1
45°	781.8	793.9	564.9	311.0	255.9	249.3	237.1	222.8	204.2	188.1	186.6
47.5°	936.7	910.0	553.4	268.7	231.4	228.7	217.5	200.9	181.2	168.3	167.2
50°	1147.9	1077.8	547.8	235.1	209.8	210.6	201.5	184.0	165.4	155.8	154.7
52.5°	1400.5	1273.1	558.6	209.1	192.5	195.3	188.5	172.1	156.5	149.0	147.9
55°	1662.5	1475.4	570.2	190.3	176.0	181.7	179.3	165.8	151.7	144.7	143.8
57.5°	1886.8	1626.4	547.0	175.0	161.4	170.2	172.2	161.8	149.3	143.0	141.9
60°	2028.0	1687.2	486.1	160.6	149.8	161.0	168.1	160.7	150.2	149.7	148.8
62.5°	2095.0	1681.9	394.6	149.3	142.6	157.1	171.1	166.9	161.2	166.1	166.5
65°	2064.9	1601.5	293.9	141.7	137.4	158.6	180.2	178.5	164.3	169.2	169.9
67.5°	1867.0	1409.8	217.6	135.2	131.6	162.8	196.6	182.3	158.1	161.7	159.5
70°	1509.0	1117.7	167.8	127.8	125.7	162.2	203.9	180.0	151.4	152.3	146.4
72.5°	1040.6	762.2	136.5	121.0	117.3	147.9	198.7	174.3	145.8	139.6	131.8
75°	565.9	409.1	116.0	113.9	102.4	129.9	189.2	170.2	140.8	132.4	128.1
77.5°	222.7	169.8	100.7	104.2	89.5	114.7	178.5	162.4	133.8	122.9	120.7
80°	90.9	86.7	83.5	90.1	77.0	100.3	165.7	153.2	125.5	114.0	109.6
82.5°	51.5	53.9	64.9	71.1	62.5	92.4	159.5	145.8	115.5	102.1	96.9
85°	26.4	31.6	45.2	51.0	45.9	78.6	146.9	127.7	92.7	78.2	78.6
87.5°	12.7	17.6	28.6	32.0	29.8	56.9	109.8	92.5	72.2	57.1	55.4
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)