

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: P348934

Luminaire Tested: **ARCH-N-PA1-20-740-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348934  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-20-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3410 lumens  
Efficiency: N/A  
Efficacy: 142.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

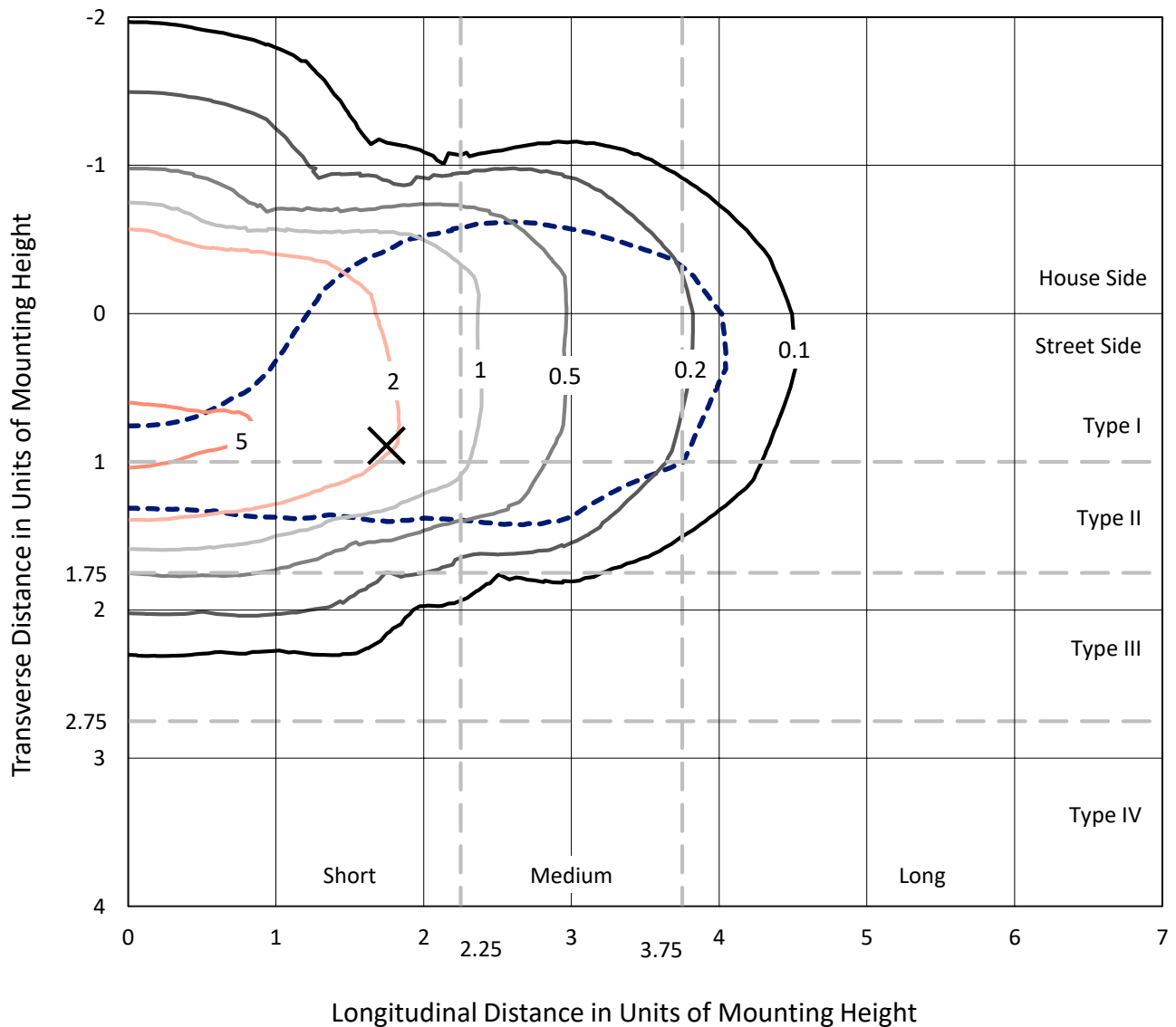
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

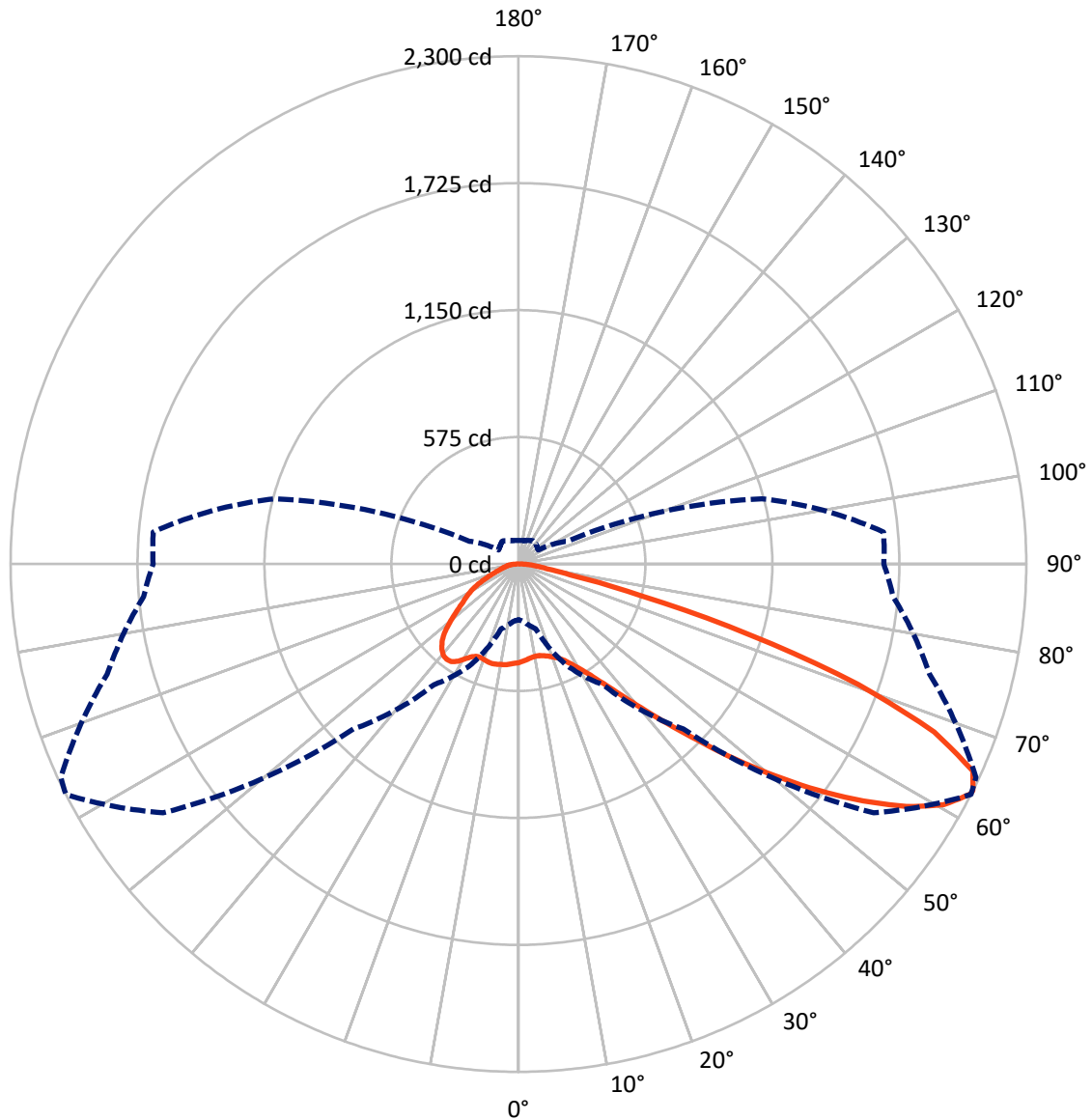


Based on 10 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	973.5	0.0	973.5
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	2436.5	0.0	2436.5
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	3410.0	0.0	3410.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.4	1.2
10°-20°	125.0	3.7
20°-30°	219.5	6.4
30°-40°	370.0	10.9
40°-50°	648.2	19.0
50°-60°	837.8	24.6
60°-70°	725.2	21.3
70°-80°	376.4	11.0
80°-90°	65.6	1.9
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°	3410.0	100.0
0°-180°	3410.0	100.0



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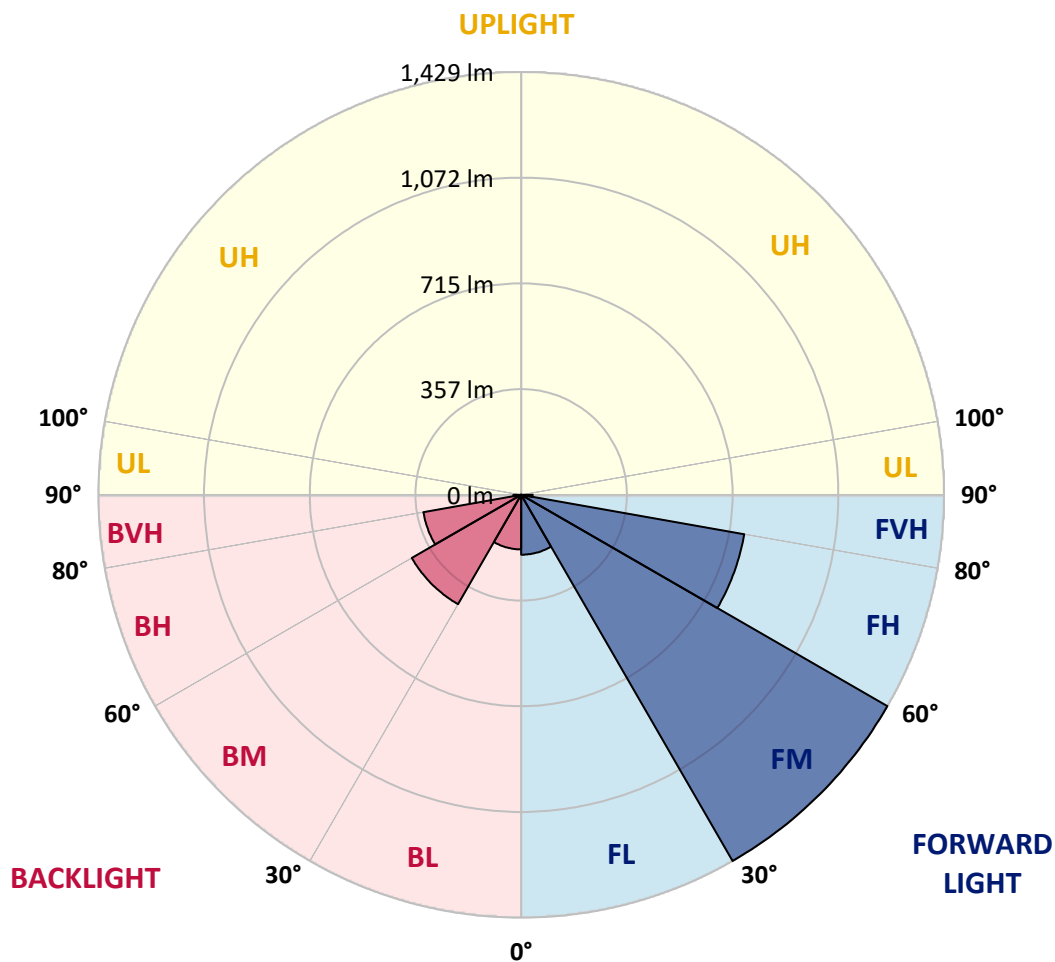
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	202.4	5.9			
FM	(30°-60°)	1429.2	41.9			
FH	(60°-80°)	765.8	22.5			G1/1800
FVH	(80°-90°)	39.1	1.1			G1/100
BL	(0°-30°)	184.4	5.4	B1/500		
BM	(30°-60°)	426.8	12.5	B1/1000		
BH	(60°-80°)	335.8	9.8	B1/500		G1/500
BVH	(80°-90°)	26.5	0.8			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5
2.5°	435.9	434.7	436.9	437.9	437.5	439.4	439.4	439.8	439.8	441.4	443.0
5°	423.2	422.5	424.8	426.4	427.6	430.5	432.4	433.4	434.3	436.6	440.4
7.5°	411.0	410.1	413.3	414.6	416.5	420.6	425.1	427.6	428.9	433.7	439.1
10°	401.2	400.8	403.4	404.7	406.9	413.0	419.3	424.8	425.7	432.1	437.2
12.5°	396.4	395.7	398.6	400.2	404.0	411.4	418.7	425.4	427.0	434.3	438.8
15°	400.2	400.8	403.4	403.7	408.2	415.8	424.1	430.8	432.4	439.8	443.0
17.5°	418.4	418.1	419.7	419.0	420.6	424.4	433.4	438.8	440.7	446.1	448.7
20°	451.3	450.3	451.6	447.4	440.4	438.5	443.9	450.0	450.6	453.8	452.2
22.5°	501.4	502.3	499.4	488.9	472.0	464.0	460.5	462.4	464.7	464.3	459.6
25°	566.8	570.0	564.5	546.0	517.6	499.1	486.4	483.5	485.1	480.6	473.3
27.5°	652.6	655.2	643.4	614.7	576.4	548.9	523.4	513.5	513.5	503.9	490.5
30°	747.1	748.7	729.9	693.5	649.1	608.3	570.6	551.5	549.9	531.0	510.0
32.5°	862.0	857.5	835.2	790.2	734.3	678.2	629.7	600.6	597.4	569.0	542.2
35°	1010.4	1010.4	964.1	912.7	844.7	773.3	709.4	664.4	661.2	629.0	594.2
37.5°	1171.5	1170.9	1129.1	1058.2	976.9	889.4	804.2	748.1	740.7	706.2	667.3
40°	1332.1	1326.6	1292.8	1225.5	1138.7	1038.8	921.3	855.9	852.4	803.3	754.4
42.5°	1449.5	1444.4	1428.4	1383.4	1326.3	1254.2	1073.6	985.2	980.1	918.1	858.5
45°	1514.3	1507.0	1504.7	1505.4	1511.7	1511.4	1261.5	1138.0	1120.2	1048.4	968.9
47.5°	1499.6	1482.4	1505.4	1564.4	1663.6	1728.7	1480.5	1319.6	1286.4	1183.7	1086.7
50°	1381.2	1372.9	1422.1	1542.4	1746.3	1899.2	1721.4	1508.2	1461.3	1311.6	1198.0
52.5°	1173.5	1189.4	1250.0	1421.1	1731.3	2002.2	1940.3	1704.2	1639.1	1433.6	1294.7
55°	934.1	954.2	1039.7	1221.0	1592.5	2003.5	2098.3	1894.1	1836.0	1559.6	1393.7
57.5°	679.8	708.2	815.1	981.3	1349.0	1866.6	2176.2	2071.8	2005.4	1683.8	1490.4
60°	427.0	447.1	563.6	756.3	1031.1	1564.4	2156.7	2214.2	2159.3	1800.9	1600.8
62.5°	275.1	284.7	335.1	540.0	719.0	1147.3	2012.8	2295.9	2272.2	1907.8	1684.1
63°	252.1	260.4	303.5	499.1	666.7	1057.0	1964.3	2300.0	2286.0	1927.9	1703.5
65°	180.3	189.2	211.6	343.1	492.1	709.1	1683.1	2261.4	2277.0	1961.4	1730.0
67.5°	142.3	145.2	155.4	208.4	349.1	402.7	1132.6	2030.7	2099.3	1925.7	1690.8
70°	127.3	129.6	141.1	159.9	264.2	261.1	590.7	1632.7	1774.7	1803.7	1591.8
72.5°	111.1	112.7	126.7	150.6	201.7	199.5	256.9	1097.8	1270.5	1580.4	1454.9
75°	91.9	93.5	105.3	133.7	170.7	157.7	160.8	573.8	728.3	1238.9	1275.9
77.5°	75.6	76.6	86.5	107.5	150.3	121.6	124.5	241.3	353.9	844.4	1007.5
80°	54.9	55.2	64.5	81.7	114.9	109.8	92.5	131.5	160.5	462.7	633.8
82.5°	38.3	38.6	48.2	57.1	79.1	109.5	67.3	88.1	96.4	213.2	282.1
85°	26.8	26.2	32.9	37.7	50.1	66.4	51.4	56.5	59.7	92.2	76.0
87.5°	11.8	11.5	18.5	20.1	25.2	30.6	40.8	29.7	31.6	44.7	23.9
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°	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5	446.5
2.5°	443.3	444.6	446.5	449.3	451.6	452.5	454.4	454.8	457.6	455.1	455.4
5°	442.6	444.2	448.4	453.5	457.0	459.6	464.3	465.9	468.8	467.5	467.2
7.5°	441.7	444.6	450.6	458.0	463.4	467.5	472.0	474.9	477.7	477.1	476.5
10°	440.4	443.9	452.5	459.9	467.5	472.0	475.2	475.5	476.5	475.8	474.2
12.5°	441.4	445.2	455.1	462.4	470.4	473.6	472.6	467.9	463.7	460.2	459.6
15°	444.6	449.0	458.3	465.0	471.4	469.4	463.7	453.2	445.5	441.0	441.4
17.5°	447.7	451.6	458.6	464.0	467.2	461.5	452.5	443.6	440.1	436.6	435.9
20°	450.6	451.3	455.7	460.5	460.2	455.7	447.4	436.6	429.6	423.8	424.1
22.5°	455.1	452.5	452.9	455.7	459.2	455.1	435.6	416.8	406.3	399.6	399.2
25°	465.3	459.9	454.8	456.4	469.8	443.3	410.4	385.8	376.6	370.5	371.2
27.5°	479.3	472.0	461.8	470.4	477.7	420.0	374.3	349.1	342.8	336.4	338.0
30°	494.7	484.1	471.7	500.7	468.8	383.0	329.7	306.7	300.9	294.9	296.2
32.5°	522.1	506.5	490.2	537.1	448.1	338.0	282.8	262.0	258.2	254.3	254.7
35°	567.7	549.2	531.7	564.9	421.3	291.1	240.6	225.9	222.8	218.3	218.3
37.5°	635.1	606.0	596.8	579.5	384.6	247.3	209.7	199.8	193.1	187.0	187.0
40°	713.3	678.8	671.5	584.0	336.7	210.9	188.0	179.4	170.4	161.5	162.1
42.5°	808.4	761.8	744.9	578.0	278.6	187.7	172.7	162.8	154.1	146.5	145.2
45°	915.6	856.6	813.8	560.4	225.9	173.3	162.8	151.0	140.1	133.4	132.1
47.5°	1025.1	959.3	874.7	525.3	188.9	163.1	156.1	139.5	131.8	127.3	126.7
50°	1129.7	1061.1	925.2	470.1	167.5	155.7	146.2	134.0	127.7	123.8	123.5
52.5°	1222.6	1157.8	967.6	413.0	153.2	149.7	141.7	131.5	124.8	121.3	120.6
55°	1311.0	1255.8	1009.7	361.9	140.7	139.5	139.5	128.9	121.6	118.4	117.8
57.5°	1408.0	1367.2	1052.2	324.6	129.6	132.1	136.6	126.1	118.1	115.2	114.9
60°	1520.0	1496.1	1096.9	291.7	119.7	124.1	132.4	122.2	113.9	111.7	111.1
62.5°	1634.6	1635.2	1135.5	252.1	111.4	118.1	127.7	118.7	110.1	108.5	108.2
63°	1654.7	1660.5	1140.9	243.5	109.5	116.8	126.4	117.4	109.1	107.5	107.2
65°	1704.2	1729.4	1145.4	207.1	102.4	112.0	121.6	113.3	105.0	104.7	104.0
67.5°	1692.4	1733.5	1117.6	162.4	94.5	105.3	114.9	107.2	99.9	99.9	98.6
70°	1604.3	1631.1	1032.4	125.4	88.4	98.3	106.9	100.8	93.2	93.8	91.3
72.5°	1469.3	1439.9	849.2	98.0	81.1	90.3	97.7	92.5	85.8	85.2	82.3
75°	1271.4	1174.7	608.3	79.1	72.1	79.8	87.4	83.6	77.5	74.0	73.4
77.5°	968.9	833.9	364.5	67.0	64.5	70.8	75.6	72.8	68.0	63.8	64.1
80°	577.0	480.9	164.4	56.8	55.8	60.6	64.5	62.2	59.0	53.9	52.7
82.5°	233.6	186.1	73.7	46.0	47.2	50.7	54.3	52.3	49.8	48.5	41.2
85°	60.6	58.4	43.1	34.5	36.4	38.0	42.8	42.8	40.5	33.2	30.6
87.5°	17.2	23.0	23.9	21.7	24.6	24.9	29.7	29.7	30.3	20.4	18.5
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)