

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: P348963

Luminaire Tested: **ARCH-N-PA1-30-830-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348963  
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-PA1-30-830-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3484 lumens  
Efficiency: N/A  
Efficacy: 112.4 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

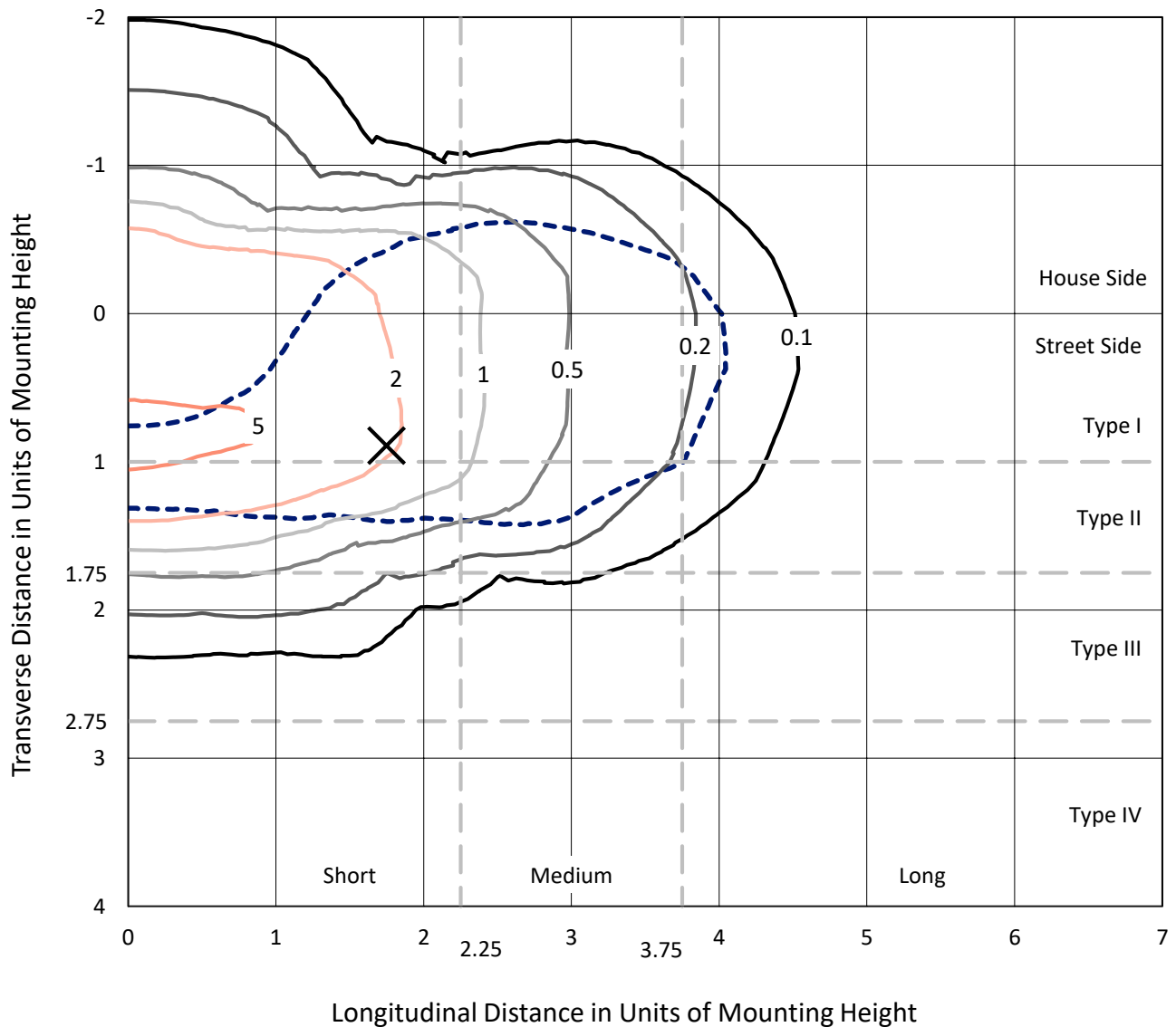
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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 CATALOG NUMBER: ARCH-N-PA1-30-830-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

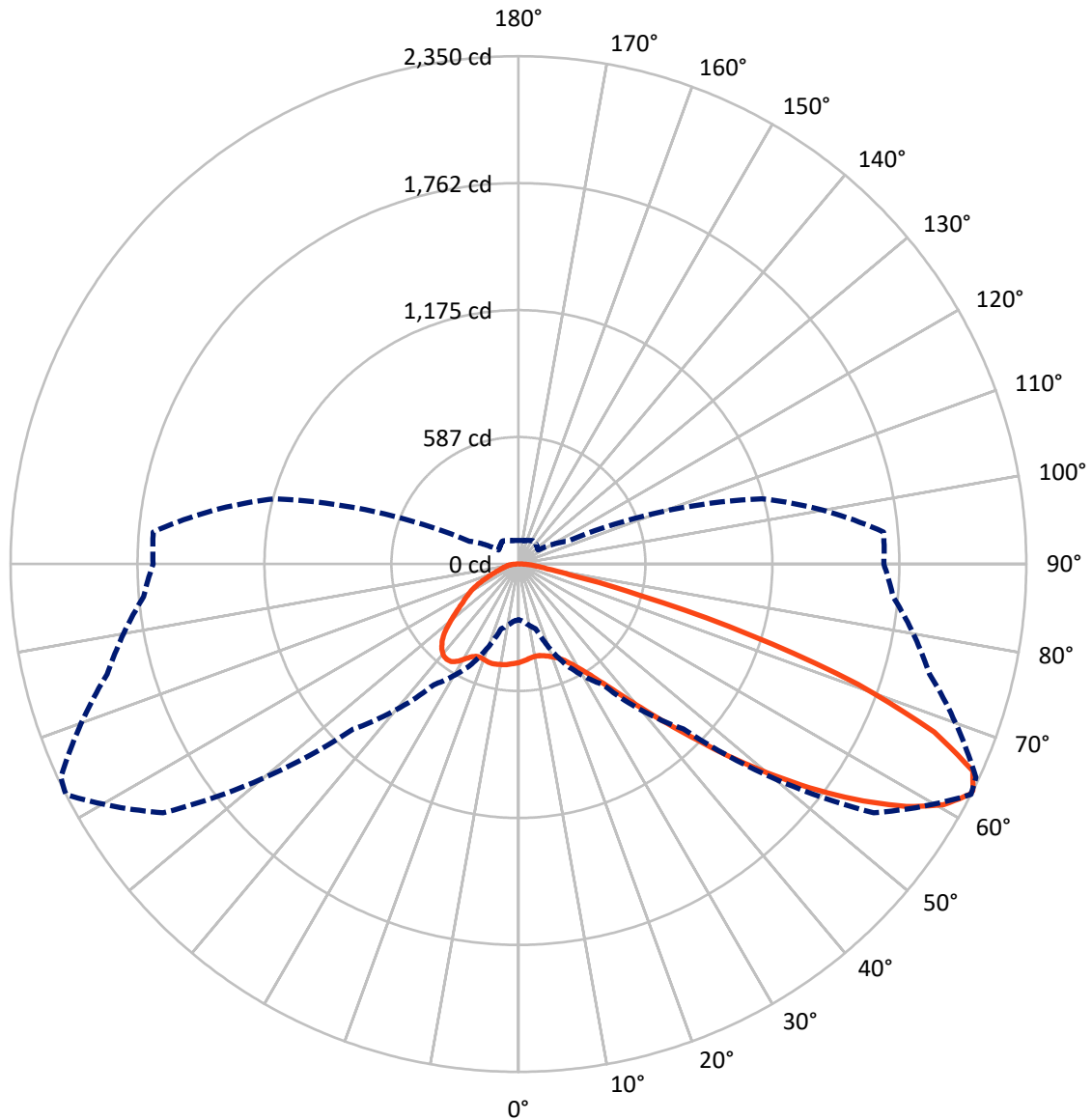
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P348963  
CATALOG NUMBER: ARCH-N-PA1-30-830-U-T2U

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P348963

CATALOG NUMBER: ARCH-N-PA1-30-830-U-T2U

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	994.7	0.0	994.7
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	2489.4	0.0	2489.4
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	3484.0	0.0	3484.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.3	1.2
10°-20°	127.7	3.7
20°-30°	224.3	6.4
30°-40°	378.0	10.9
40°-50°	662.2	19.0
50°-60°	855.9	24.6
60°-70°	740.9	21.3
70°-80°	384.6	11.0
80°-90°	67.0	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°	3484.0	100.0
0°-180°	3484.0	100.0



REPORT NUMBER: P348963

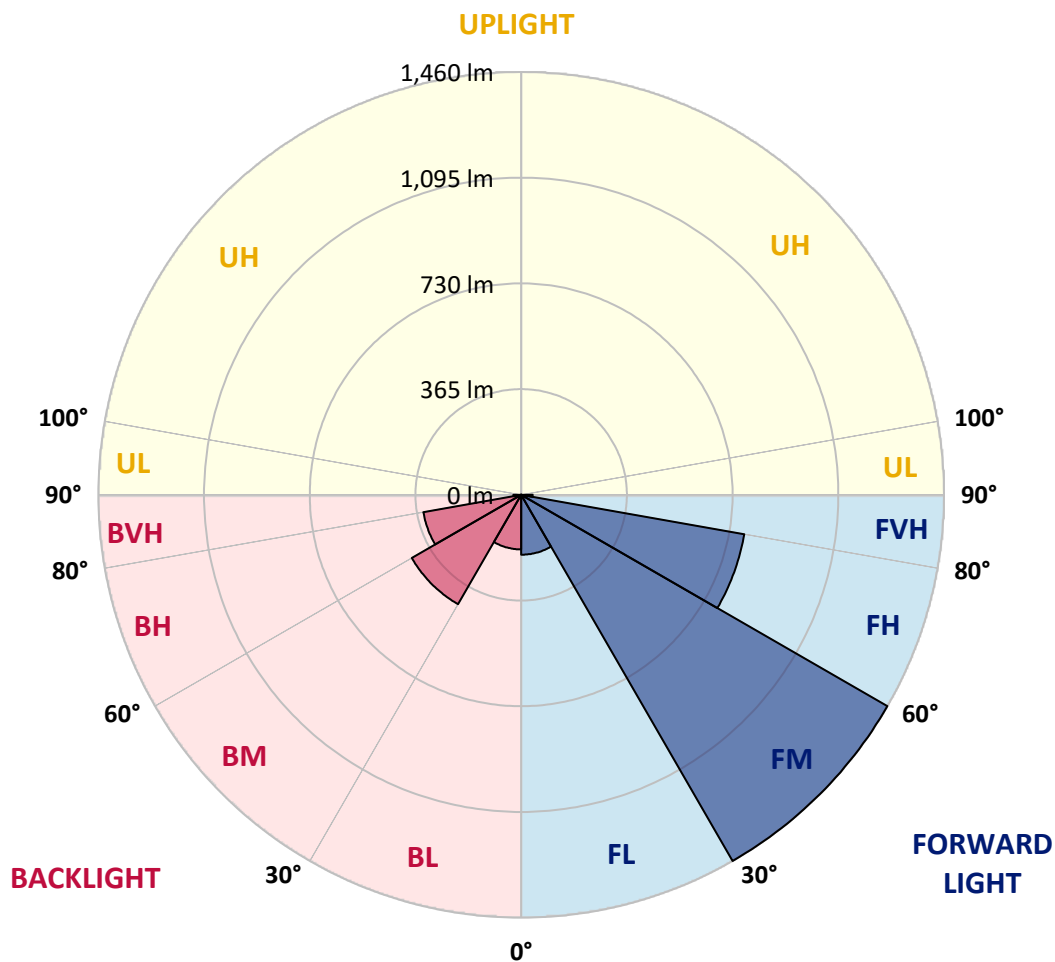
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	206.8	5.9			
FM	(30°-60°)	1460.2	41.9			
FH	(60°-80°)	782.4	22.5			G1/1800
FVH	(80°-90°)	39.9	1.1			G1/100
BL	(0°-30°)	188.4	5.4	B1/500		
BM	(30°-60°)	436.0	12.5	B1/1000		
BH	(60°-80°)	343.1	9.8	B1/500		G1/500
BVH	(80°-90°)	27.1	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





REPORT NUMBER: P348963

CATALOG NUMBER: ARCH-N-PA1-30-830-U-T2U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2
2.5°	445.4	444.1	446.4	447.4	447.0	449.0	449.0	449.3	449.3	450.9	452.6
5°	432.4	431.7	434.0	435.6	436.9	439.9	441.8	442.8	443.8	446.0	450.0
7.5°	420.0	419.0	422.2	423.6	425.5	429.7	434.3	436.9	438.2	443.1	448.7
10°	409.9	409.5	412.1	413.4	415.7	421.9	428.4	434.0	435.0	441.5	446.7
12.5°	405.0	404.3	407.2	408.9	412.8	420.3	427.8	434.6	436.3	443.8	448.3
15°	408.9	409.5	412.1	412.5	417.0	424.9	433.3	440.2	441.8	449.3	452.6
17.5°	427.5	427.1	428.8	428.1	429.7	433.7	442.8	448.3	450.3	455.8	458.4
20°	461.0	460.1	461.4	457.1	450.0	448.0	453.5	459.7	460.4	463.7	462.0
22.5°	512.2	513.2	510.3	499.5	482.2	474.1	470.5	472.5	474.7	474.4	469.5
25°	579.1	582.3	576.8	557.9	528.9	510.0	496.9	494.0	495.6	491.0	483.5
27.5°	666.8	669.4	657.3	628.0	588.9	560.8	534.7	524.6	524.6	514.8	501.2
30°	763.3	764.9	745.7	708.5	663.2	621.5	583.0	563.4	561.8	542.6	521.0
32.5°	880.7	876.1	853.3	807.3	750.3	692.9	643.3	613.6	610.4	581.4	554.0
35°	1032.3	1032.3	985.0	932.5	863.1	790.0	724.8	678.9	675.6	642.7	607.1
37.5°	1197.0	1196.3	1153.6	1081.2	998.1	908.7	821.7	764.3	756.8	721.6	681.8
40°	1361.0	1355.4	1320.9	1252.1	1163.4	1061.3	941.3	874.5	870.9	820.7	770.8
42.5°	1481.0	1475.7	1459.4	1413.5	1355.1	1281.4	1096.9	1006.5	1001.3	938.1	877.1
45°	1547.2	1539.7	1537.4	1538.0	1544.5	1544.2	1288.9	1162.7	1144.5	1071.1	989.9
47.5°	1532.2	1514.5	1538.0	1598.3	1699.7	1766.3	1512.6	1348.3	1314.3	1209.4	1110.2
50°	1411.2	1402.7	1452.9	1575.8	1784.2	1940.4	1758.8	1541.0	1493.0	1340.1	1224.0
52.5°	1198.9	1215.2	1277.2	1451.9	1768.9	2045.7	1982.4	1741.2	1674.6	1464.7	1322.8
55°	954.4	974.9	1062.3	1247.5	1627.0	2047.0	2143.8	1935.2	1875.8	1593.5	1423.9
57.5°	694.5	723.5	832.8	1002.6	1378.3	1907.1	2223.4	2116.8	2049.0	1720.3	1522.7
60°	436.3	456.8	575.8	772.8	1053.5	1598.3	2203.5	2262.2	2206.1	1840.0	1635.5
62.5°	281.1	290.8	342.4	551.7	734.6	1172.2	2056.5	2345.7	2321.5	1949.2	1720.6
63°	257.6	266.1	310.1	510.0	681.1	1079.9	2006.9	2349.9	2335.6	1969.7	1740.5
65°	184.2	193.4	216.2	350.5	502.8	724.5	1719.6	2310.5	2326.4	2004.0	1767.6
67.5°	145.4	148.4	158.8	212.9	356.7	411.5	1157.2	2074.7	2144.8	1967.4	1727.5
70°	130.1	132.4	144.1	163.4	270.0	266.7	603.5	1668.1	1813.2	1842.9	1626.4
72.5°	113.5	115.1	129.4	153.9	206.1	203.8	262.5	1121.6	1298.0	1614.6	1486.5
75°	93.9	95.5	107.6	136.6	174.4	161.1	164.3	586.3	744.1	1265.8	1303.6
77.5°	77.3	78.3	88.4	109.9	153.6	124.2	127.2	246.5	361.6	862.8	1029.4
80°	56.1	56.4	65.9	83.5	117.4	112.2	94.6	134.3	164.0	472.8	647.6
82.5°	39.1	39.5	49.2	58.4	80.9	111.8	68.8	90.0	98.5	217.8	288.2
85°	27.4	26.7	33.6	38.5	51.2	67.8	52.5	57.7	61.0	94.2	77.6
87.5°	12.1	11.7	18.9	20.5	25.8	31.3	41.7	30.3	32.3	45.6	24.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P348963

CATALOG NUMBER: ARCH-N-PA1-30-830-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2	456.2
2.5°	452.9	454.2	456.2	459.1	461.4	462.4	464.3	464.6	467.6	465.0	465.3
5°	452.2	453.9	458.1	463.3	466.9	469.5	474.4	476.0	479.0	477.7	477.4
7.5°	451.3	454.2	460.4	467.9	473.4	477.7	482.2	485.2	488.1	487.5	486.8
10°	450.0	453.5	462.4	469.9	477.7	482.2	485.5	485.8	486.8	486.2	484.5
12.5°	450.9	454.9	465.0	472.5	480.6	483.9	482.9	478.0	473.8	470.2	469.5
15°	454.2	458.8	468.2	475.1	481.6	479.6	473.8	463.0	455.2	450.6	450.9
17.5°	457.5	461.4	468.5	474.1	477.4	471.5	462.4	453.2	449.6	446.0	445.4
20°	460.4	461.0	465.6	470.5	470.2	465.6	457.1	446.0	438.9	433.0	433.3
22.5°	465.0	462.4	462.7	465.6	469.2	465.0	445.1	425.8	415.1	408.2	407.9
25°	475.4	469.9	464.6	466.3	480.0	452.9	419.3	394.2	384.8	378.6	379.2
27.5°	489.7	482.2	471.8	480.6	488.1	429.1	382.5	356.7	350.2	343.7	345.3
30°	505.4	494.6	481.9	511.6	479.0	391.3	336.8	313.3	307.5	301.3	302.6
32.5°	533.4	517.5	500.8	548.8	457.8	345.3	288.9	267.7	263.8	259.9	260.2
35°	580.1	561.1	543.2	577.1	430.4	297.4	245.8	230.9	227.6	223.0	223.0
37.5°	648.9	619.2	609.7	592.1	392.9	252.7	214.2	204.1	197.3	191.1	191.1
40°	728.7	693.5	686.0	596.7	344.0	215.5	192.0	183.2	174.1	165.0	165.6
42.5°	825.9	778.3	761.0	590.5	284.7	191.7	176.4	166.3	157.5	149.7	148.4
45°	935.5	875.1	831.5	572.6	230.9	177.1	166.3	154.2	143.1	136.3	135.0
47.5°	1047.3	980.1	893.7	536.7	193.0	166.6	159.4	142.5	134.7	130.1	129.4
50°	1154.3	1084.1	945.2	480.3	171.2	159.1	149.3	136.9	130.4	126.5	126.2
52.5°	1249.1	1182.9	988.6	421.9	156.5	152.9	144.8	134.3	127.5	123.9	123.3
55°	1339.5	1283.0	1031.7	369.8	143.8	142.5	142.5	131.7	124.2	121.0	120.3
57.5°	1438.6	1396.8	1075.0	331.6	132.4	135.0	139.6	128.8	120.6	117.7	117.4
60°	1553.0	1528.6	1120.7	298.0	122.3	126.8	135.3	124.9	116.4	114.1	113.5
62.5°	1670.1	1670.7	1160.1	257.6	113.8	120.6	130.4	121.3	112.5	110.9	110.5
63°	1690.6	1696.5	1165.7	248.8	111.8	119.3	129.1	120.0	111.5	109.9	109.6
65°	1741.2	1766.9	1170.2	211.6	104.7	114.4	124.2	115.8	107.3	106.9	106.3
67.5°	1729.1	1771.2	1141.9	166.0	96.5	107.6	117.4	109.6	102.1	102.1	100.8
70°	1639.1	1666.5	1054.8	128.1	90.3	100.4	109.2	103.0	95.2	95.9	93.3
72.5°	1501.2	1471.2	867.6	100.1	82.8	92.3	99.8	94.6	87.7	87.1	84.1
75°	1299.0	1200.2	621.5	80.9	73.7	81.5	89.3	85.4	79.2	75.6	75.0
77.5°	989.9	852.0	372.4	68.5	65.9	72.4	77.3	74.3	69.5	65.2	65.5
80°	589.5	491.4	167.9	58.0	57.1	62.0	65.9	63.6	60.3	55.1	53.8
82.5°	238.7	190.1	75.3	47.0	48.3	51.8	55.4	53.5	50.9	49.6	42.1
85°	62.0	59.7	44.0	35.2	37.2	38.8	43.7	43.7	41.4	33.9	31.3
87.5°	17.6	23.5	24.5	22.2	25.1	25.4	30.3	30.3	31.0	20.9	18.9
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)