

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: P214868

Luminaire Tested: **ARCH-AF24-30-D-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214868  
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-AF24-30-D-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4045.8 lumens  
Efficiency: N/A  
Efficacy: 130.5 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): 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

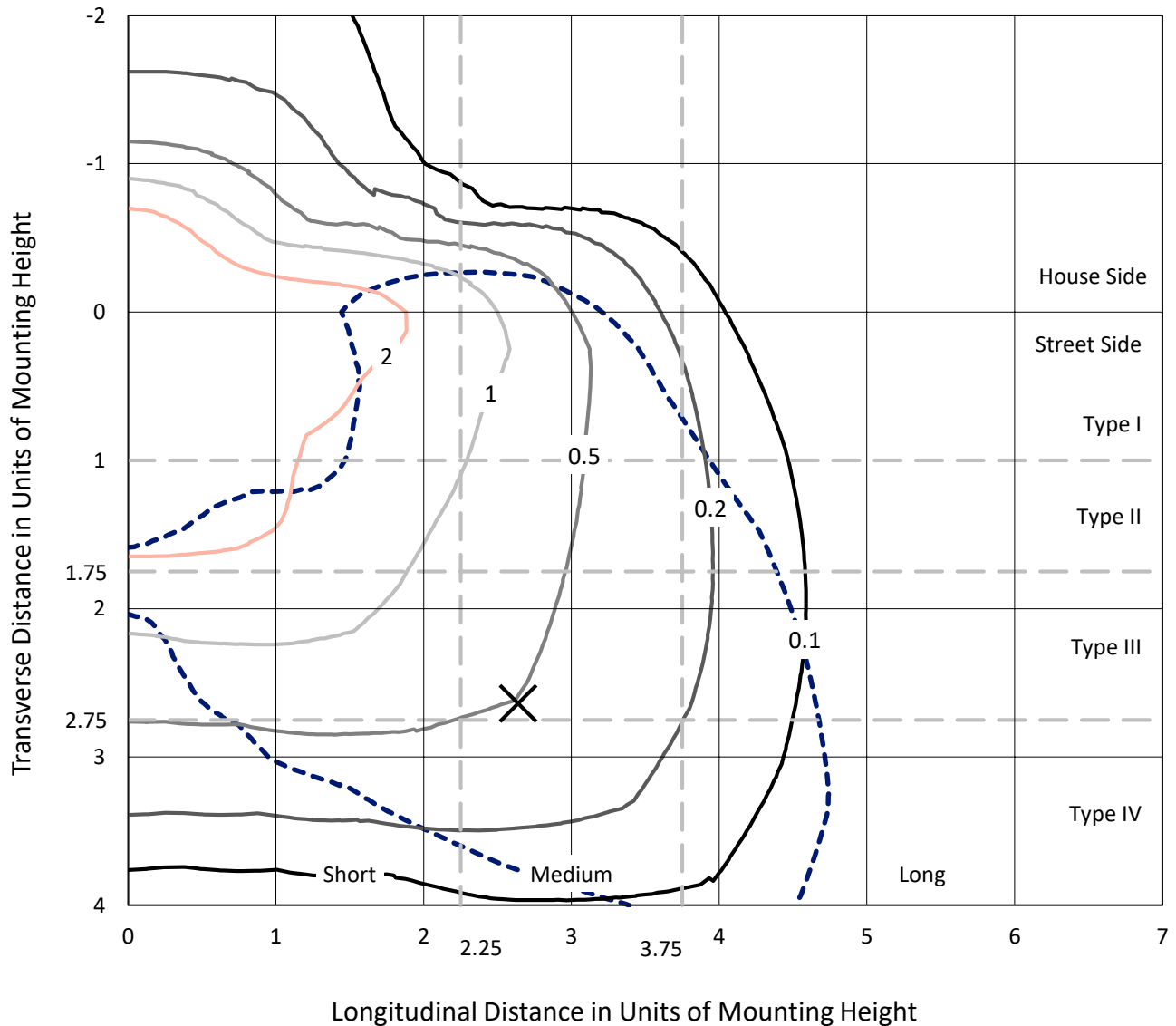


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

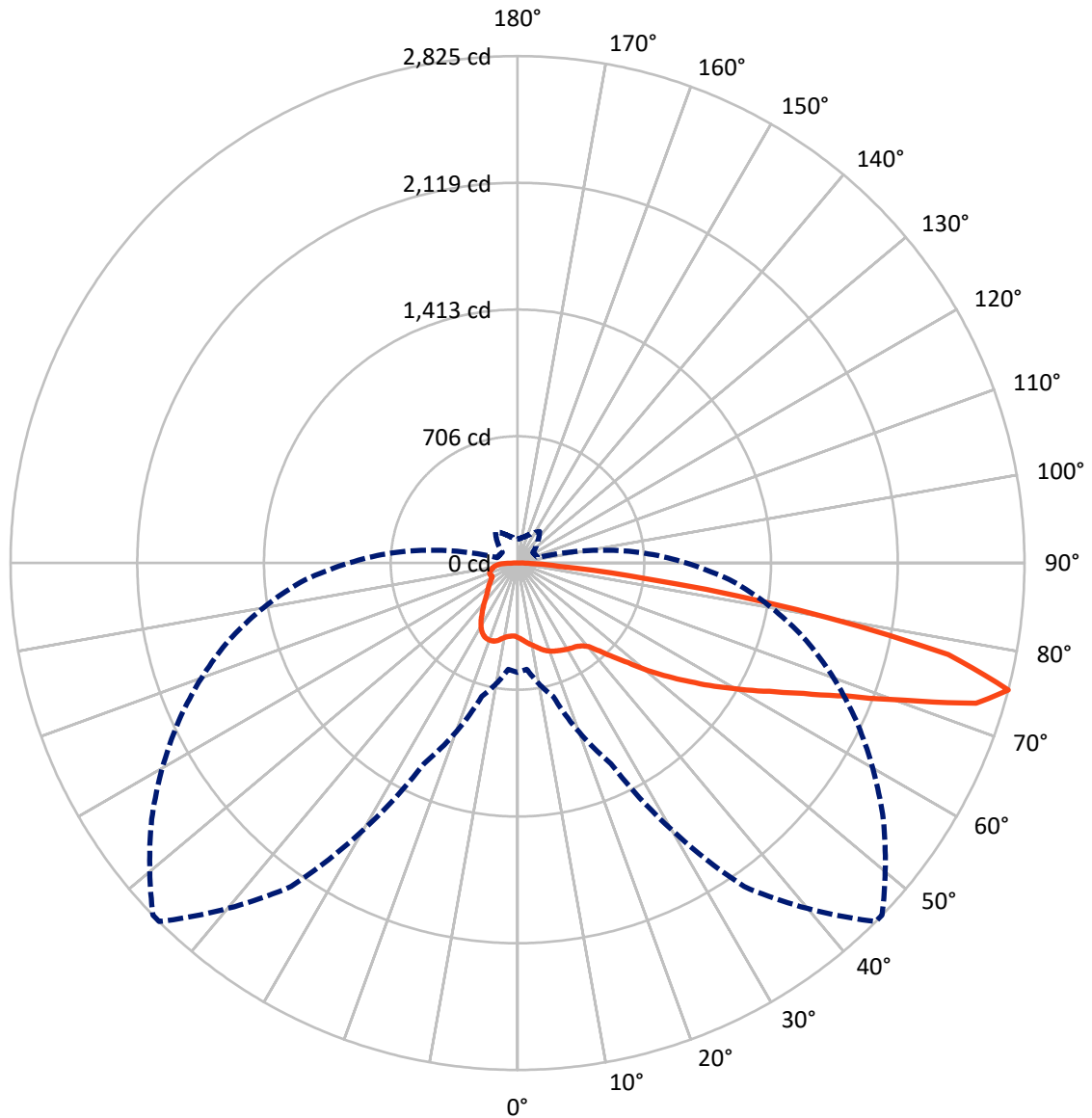


Based on 10 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Medium - Non-Cutoff

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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	937.2	0.0	937.2
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	3108.5	0.0	3108.5
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	4045.8	0.0	4045.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.1	1.0
10°-20°	133.2	3.3
20°-30°	228.6	5.6
30°-40°	319.7	7.9
40°-50°	468.9	11.6
50°-60°	730.5	18.1
60°-70°	1051.1	26.0
70°-80°	915.6	22.6
80°-90°	157.2	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°	4045.8	100.0
0°-180°	4045.8	100.0

**Coefficient of Utilization**



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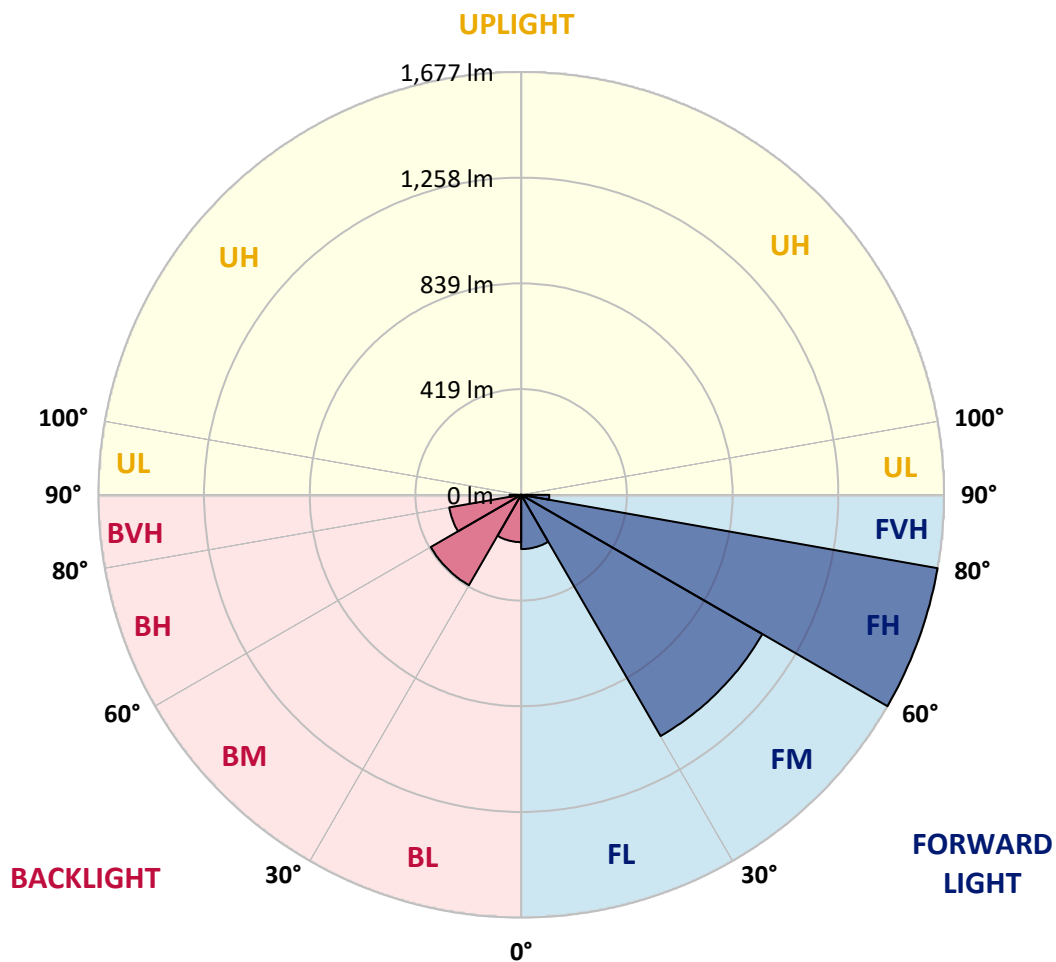
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.1	5.3			
FM	(30°-60°)	1104.8	27.3			
FH	(60°-80°)	1677.0	41.5			G1/1800
FVH	(80°-90°)	111.6	2.8			G2/225
BL	(0°-30°)	187.7	4.6	B1/500		
BM	(30°-60°)	414.2	10.2	B1/1000		
BH	(60°-80°)	289.6	7.2	B1/500		G1/500
BVH	(80°-90°)	45.7	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°	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7
2.5°	435.2	432.1	432.1	429.7	429.7	425.8	424.2	423.4	419.5	417.2	414.7
5°	460.4	456.4	455.6	450.2	447.8	439.2	438.3	432.8	425.8	418.7	413.2
7.5°	483.2	480.9	476.9	471.4	464.3	453.3	452.6	443.9	432.1	422.6	414.7
10°	499.7	498.2	492.7	485.6	477.7	466.7	466.0	456.4	442.3	431.3	420.2
12.5°	519.5	517.1	509.9	500.5	491.8	481.6	480.9	473.0	457.3	443.0	428.9
15°	538.3	535.2	526.5	517.1	507.6	499.0	499.0	490.3	473.7	457.3	440.7
17.5°	547.8	546.2	537.6	527.3	519.5	513.1	512.3	504.4	487.9	470.7	452.6
20°	550.9	551.7	543.8	532.8	527.3	524.2	523.3	517.8	499.7	483.2	466.0
22.5°	550.1	552.5	546.2	534.4	532.8	532.8	532.8	526.5	512.3	495.8	478.5
25°	553.2	556.4	551.7	537.6	537.6	540.6	540.6	537.6	525.0	510.8	493.5
27.5°	564.3	566.6	562.7	543.0	543.8	548.5	547.8	548.5	540.6	527.3	509.9
30°	577.7	580.8	576.1	551.7	550.9	555.7	555.7	559.6	554.0	539.9	525.7
32.5°	613.9	613.1	598.1	561.1	558.7	563.4	563.4	567.4	564.3	553.2	539.9
35°	721.7	709.8	676.8	591.8	568.2	570.6	570.6	577.7	579.2	570.6	558.7
37.5°	831.9	827.9	802.7	673.7	602.8	585.5	584.7	594.9	602.0	594.9	587.1
40°	942.9	939.7	934.2	783.1	675.2	612.2	609.9	618.6	631.2	626.5	621.7
42.5°	1046.0	1044.3	1049.9	890.9	767.3	669.7	662.7	652.4	670.5	668.9	668.9
45°	1127.0	1130.9	1134.0	991.6	867.3	743.7	735.1	700.4	724.9	731.1	735.8
47.5°	1172.6	1175.8	1186.8	1090.0	967.2	829.5	823.2	766.5	798.8	817.6	831.0
50°	1238.0	1229.3	1238.7	1186.0	1087.6	941.2	923.9	855.5	896.4	929.5	961.0
52.5°	1300.9	1286.8	1294.6	1297.0	1224.6	1050.7	1032.6	960.1	1011.3	1063.3	1119.1
55°	1357.6	1356.7	1364.6	1404.8	1356.7	1167.9	1147.4	1075.8	1149.8	1205.6	1300.2
57.5°	1403.2	1411.1	1445.7	1529.9	1509.5	1295.4	1272.6	1210.4	1297.7	1353.7	1510.3
60°	1456.8	1469.4	1526.8	1636.2	1648.8	1429.2	1405.5	1360.7	1449.6	1506.3	1753.4
62.5°	1474.8	1492.9	1610.9	1747.9	1794.4	1575.5	1554.4	1524.4	1609.4	1660.6	1995.9
65°	1354.4	1389.1	1657.4	1805.4	1951.0	1751.9	1733.8	1707.8	1768.4	1802.2	2160.3
67.5°	1321.3	1337.1	1567.0	1888.1	2098.2	1978.5	1960.4	1915.6	1917.1	1903.0	2213.9
70°	1274.9	1292.3	1474.1	1950.2	2309.1	2288.5	2266.6	2134.4	2053.3	1967.5	2108.4
72.5°	1086.1	1080.5	1270.2	1782.6	2410.6	2672.7	2646.7	2369.7	2154.0	1911.6	1779.4
75°	609.9	594.2	770.5	1233.3	2201.3	2825.3	2824.6	2488.5	2083.2	1665.3	1211.2
77.5°	177.1	172.4	254.2	517.1	1481.9	2454.7	2484.5	2244.6	1738.5	1196.2	665.0
80°	83.5	85.0	109.4	170.7	632.8	1584.2	1670.0	1478.0	1038.8	551.7	274.7
82.5°	52.7	53.5	74.8	110.2	267.6	719.3	790.1	665.0	411.6	238.4	121.2
85°	33.0	33.0	49.6	72.4	159.8	229.8	249.5	226.7	176.3	129.8	66.1
87.5°	18.1	18.1	29.9	41.7	87.4	74.0	76.3	90.5	110.2	79.5	33.0
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°	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7
2.5°	414.0	412.4	410.0	409.3	408.5	407.6	408.5	410.0	408.5	408.5	409.3
5°	411.6	410.0	406.9	406.9	407.6	408.5	412.4	414.7	415.5	415.5	415.5
7.5°	411.6	409.3	406.9	407.6	409.3	412.4	418.7	422.6	425.8	426.6	426.6
10°	415.5	412.4	410.8	412.4	417.2	419.5	425.8	432.1	436.0	437.6	437.6
12.5°	422.6	419.5	419.5	422.6	428.9	432.1	437.6	442.3	447.0	449.4	449.4
15°	434.4	430.5	431.3	436.8	443.9	447.0	450.9	452.6	456.4	459.6	459.6
17.5°	445.4	441.5	443.0	449.4	454.1	455.6	458.1	457.3	458.8	461.1	462.0
20°	458.1	454.1	454.9	458.8	459.6	458.1	458.1	455.6	454.9	458.8	460.4
22.5°	470.7	466.7	466.0	463.5	459.6	455.6	453.3	450.9	449.4	453.3	454.9
25°	485.6	480.1	476.2	466.0	455.6	448.6	445.4	443.9	443.0	447.0	448.6
27.5°	502.1	496.6	484.8	462.8	446.2	434.4	432.1	432.1	433.6	436.0	437.6
30°	517.8	512.3	491.1	455.6	429.7	412.4	410.0	412.4	416.3	418.7	421.0
32.5°	533.6	528.0	495.0	444.7	405.3	383.3	381.7	385.7	391.9	393.5	395.1
35°	554.8	549.3	499.7	428.9	374.6	351.0	349.4	351.8	357.3	359.7	362.0
37.5°	584.7	581.5	506.9	411.6	346.3	320.3	315.6	314.0	317.1	316.4	319.6
40°	624.1	626.5	519.5	388.8	318.8	292.0	281.7	277.0	273.8	267.6	270.8
42.5°	681.6	683.1	533.6	362.8	295.1	265.3	251.9	243.2	236.9	226.7	228.2
45°	765.8	752.4	550.1	335.2	273.8	244.0	228.2	218.0	209.3	200.7	201.5
47.5°	877.5	836.6	568.2	312.4	252.7	226.7	212.5	200.7	190.5	183.4	184.1
50°	1015.3	941.2	586.4	291.2	231.4	213.3	200.7	188.1	177.9	170.7	170.0
52.5°	1197.1	1067.1	598.1	267.6	210.1	201.5	190.5	178.6	166.0	157.4	156.6
55°	1385.9	1213.5	608.3	239.3	189.7	188.1	182.6	169.2	154.3	143.2	141.7
57.5°	1593.7	1370.1	616.2	211.8	173.9	177.1	175.5	159.8	143.2	133.0	132.2
60°	1782.6	1532.3	591.1	187.3	159.8	166.0	167.7	154.3	145.6	147.9	148.7
62.5°	1973.0	1657.4	495.0	169.2	150.3	159.0	172.4	171.5	167.7	171.5	172.4
65°	2041.5	1683.4	351.0	154.3	140.9	162.1	187.3	185.8	167.7	160.5	159.0
67.5°	2002.9	1606.2	236.1	142.5	133.8	166.0	203.1	185.8	161.3	151.9	148.7
70°	1819.5	1416.6	173.2	130.6	127.5	165.3	211.8	184.9	158.1	147.9	144.0
72.5°	1451.3	1093.1	139.3	119.6	118.0	161.3	216.5	183.4	155.1	144.0	139.3
75°	939.7	680.0	117.2	108.6	103.9	155.1	214.1	178.6	151.1	137.0	133.8
77.5°	436.0	292.8	99.9	96.1	90.5	145.6	206.9	169.2	142.5	129.1	125.1
80°	203.1	138.5	84.2	83.5	81.0	137.7	197.5	158.1	132.2	121.2	114.9
82.5°	108.6	83.5	68.4	68.4	70.8	128.3	185.8	144.8	118.9	113.3	96.8
85°	57.5	48.0	49.6	53.5	60.6	113.3	170.0	130.6	103.9	86.5	84.2
87.5°	29.2	30.7	30.7	36.2	46.4	92.1	140.0	107.8	88.2	70.8	69.3
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)