

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: P198674

Luminaire Tested: **XNV-AF-01-LED-U-AFL-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198674  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV-AF-01-LED-U-AFL-600  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4176.7 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

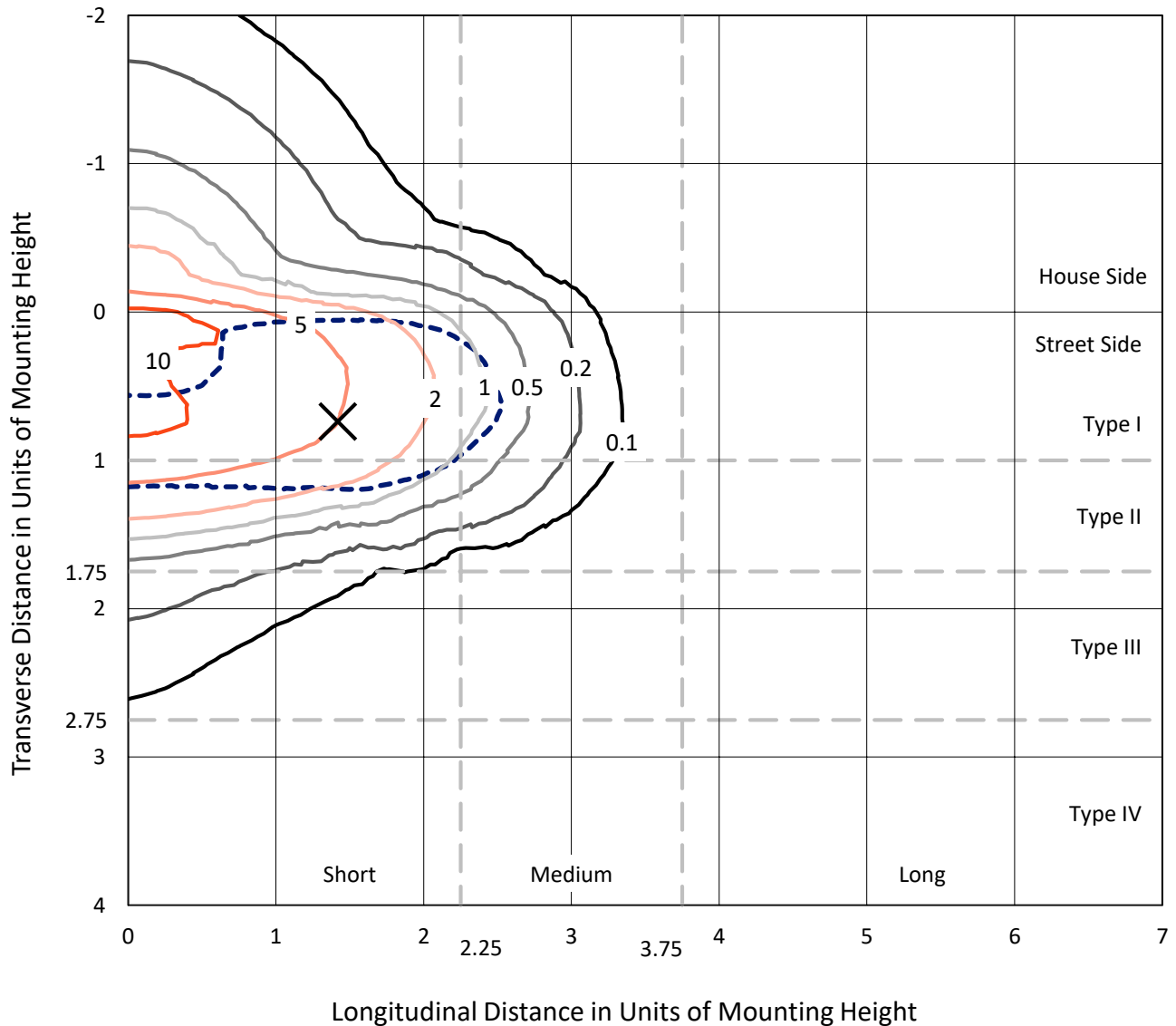
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

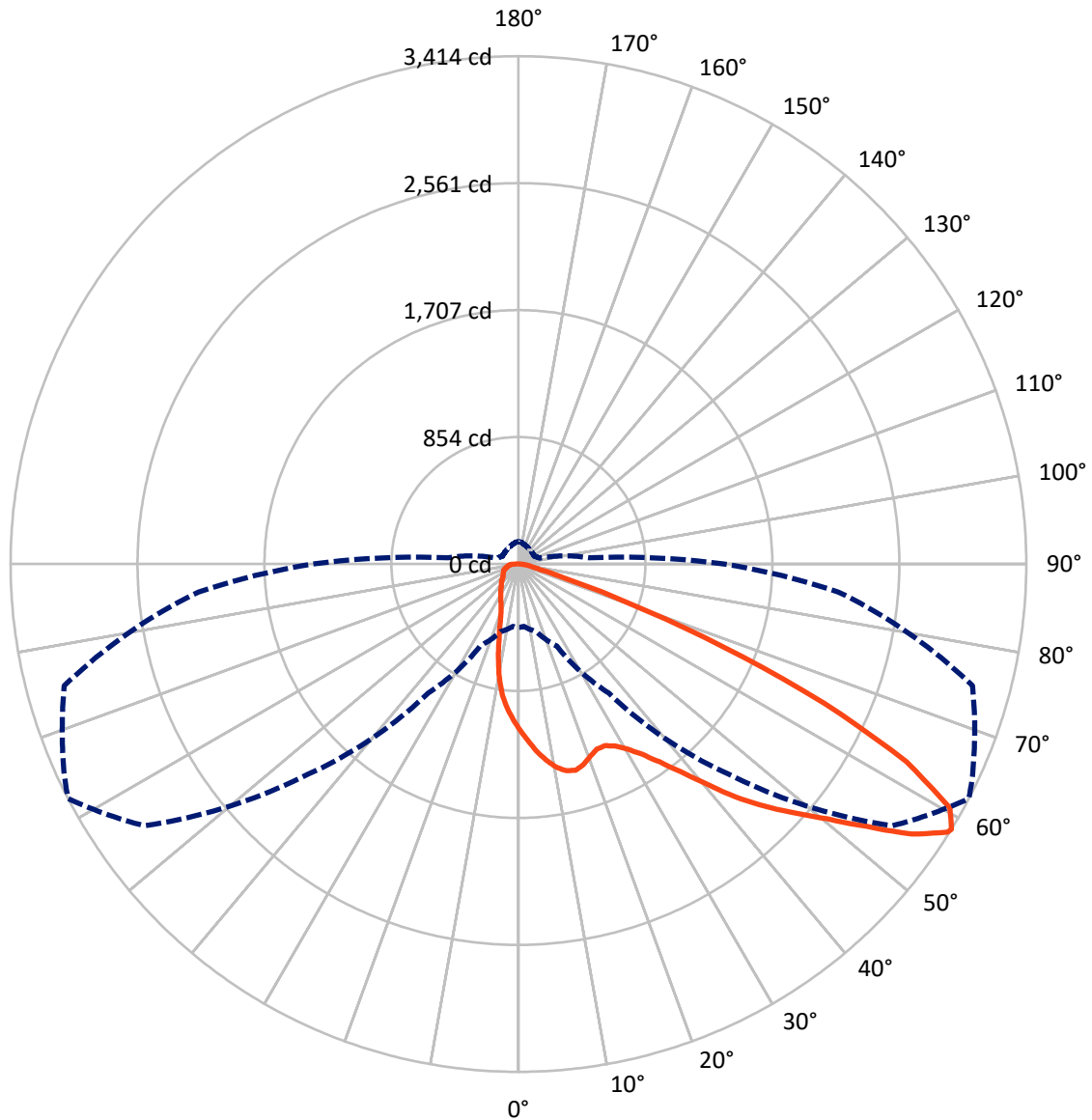
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.1 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	641.3	0.0	641.3
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	3535.4	0.0	3535.4
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	4176.7	0.0	4176.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.7	2.4
10°-20°	251.6	6.0
20°-30°	407.7	9.8
30°-40°	650.9	15.6
40°-50°	946.7	22.7
50°-60°	990.7	23.7
60°-70°	604.0	14.5
70°-80°	168.9	4.0
80°-90°	56.6	1.4
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°	4176.7	100.0
0°-180°	4176.7	100.0



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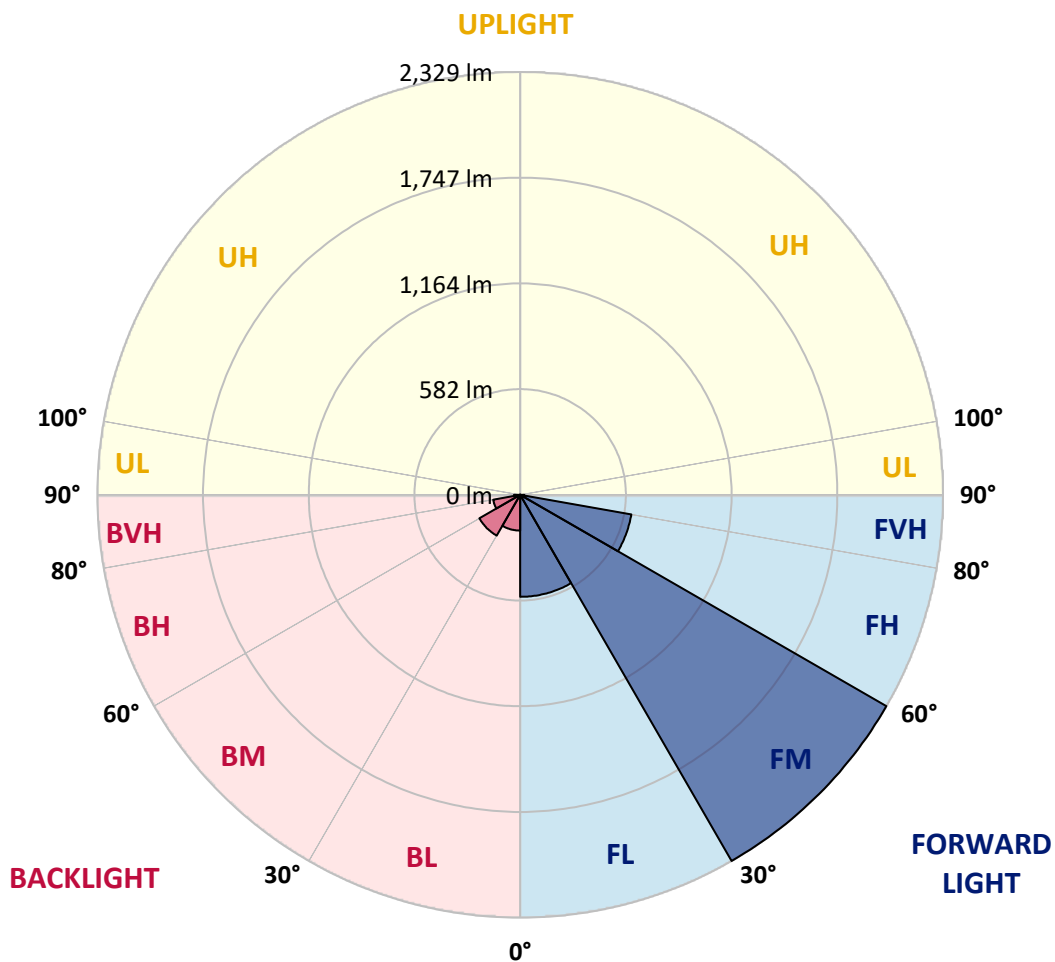
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	561.8	13.5			
FM (30°-60°)	2329.0	55.8			
FH (60°-80°)	621.9	14.9			G0/660
FVH (80°-90°)	22.8	0.5			G1/100
BL (0°-30°)	197.1	4.7	B1/500		
BM (30°-60°)	259.3	6.2	B1/1000		
BH (60°-80°)	151.0	3.6	B1/500		G1/500
BVH (80°-90°)	33.8	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°	62.5°	65°	75°	85°
0°	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1
2.5°	1265.8	1265.0	1254.2	1247.3	1238.9	1219.6	1200.2	1185.9	1178.5	1150.6	1123.5
5°	1370.4	1367.3	1361.3	1353.8	1342.8	1318.5	1288.0	1261.6	1251.2	1201.6	1151.7
7.5°	1315.1	1320.1	1338.6	1359.5	1381.4	1383.0	1361.3	1329.9	1318.5	1252.2	1179.2
10°	1161.9	1159.8	1183.0	1223.8	1296.1	1367.6	1403.4	1387.9	1376.0	1300.3	1206.5
12.5°	1115.4	1114.9	1118.8	1129.2	1174.7	1272.9	1392.6	1426.1	1421.9	1351.1	1235.7
15°	1129.5	1130.1	1129.7	1131.1	1143.6	1190.3	1332.9	1438.9	1451.9	1401.5	1265.5
17.5°	1174.7	1172.8	1167.1	1160.8	1162.7	1179.4	1268.4	1416.9	1456.1	1446.5	1290.6
20°	1244.3	1244.3	1229.0	1211.5	1200.0	1203.6	1241.5	1379.3	1436.7	1484.5	1309.4
22.5°	1331.8	1333.1	1310.4	1278.6	1252.5	1242.6	1256.9	1351.4	1413.3	1519.8	1326.1
25°	1440.4	1440.1	1407.0	1361.3	1320.1	1296.3	1296.1	1352.6	1405.9	1561.0	1343.5
27.5°	1574.8	1562.6	1523.9	1458.9	1400.7	1364.4	1348.0	1385.6	1421.4	1611.7	1367.1
30°	1726.5	1714.0	1663.3	1579.8	1501.0	1448.0	1420.9	1442.5	1468.3	1676.1	1402.6
32.5°	1876.6	1879.5	1819.9	1725.7	1624.4	1549.8	1509.6	1522.9	1540.9	1755.0	1450.5
35°	2096.4	2096.1	2018.4	1900.6	1780.2	1676.9	1626.0	1633.0	1649.5	1866.2	1518.0
37.5°	2260.3	2257.8	2207.6	2103.5	1968.0	1844.0	1770.3	1771.4	1785.5	2005.8	1606.6
40°	2277.0	2276.5	2276.3	2261.3	2168.7	2051.7	1959.6	1940.5	1946.3	2154.1	1701.0
42.5°	2149.4	2168.5	2223.3	2307.3	2333.1	2271.8	2184.6	2142.1	2129.6	2324.2	1800.6
45°	1967.4	1977.1	2073.1	2262.2	2415.9	2478.5	2413.0	2323.2	2301.8	2489.8	1881.8
47.5°	1882.8	1878.6	1934.3	2140.2	2407.8	2643.0	2647.7	2500.5	2464.2	2632.6	1951.0
50°	1701.5	1696.0	1766.2	1960.9	2319.5	2724.7	2888.6	2693.6	2626.5	2768.3	2013.7
52.5°	1339.9	1334.6	1429.0	1679.8	2122.2	2694.1	3091.8	2930.7	2816.4	2899.0	2072.1
55°	871.9	872.4	962.2	1220.9	1717.3	2516.2	3187.0	3204.5	3076.3	3029.9	2119.3
57.5°	480.1	475.6	539.6	698.6	1181.5	2111.8	3107.6	3401.8	3335.0	3142.1	2153.5
58°	426.8	421.6	470.9	607.9	1059.3	1997.7	3067.7	3414.4	3368.2	3160.6	2158.5
60°	304.1	295.2	287.7	342.8	610.3	1440.4	2801.5	3333.2	3377.8	3197.7	2153.8
62.5°	256.4	246.1	219.0	217.0	287.4	704.5	2215.4	2927.3	3052.3	3112.3	2078.1
65°	238.0	227.9	192.1	179.3	195.0	304.1	1369.9	2260.3	2427.4	2815.6	1887.5
67.5°	225.0	213.0	174.6	157.9	161.0	182.0	581.3	1478.3	1671.9	2195.6	1514.3
70°	213.3	200.0	160.8	141.5	138.9	138.3	227.1	771.9	958.5	1436.7	1014.4
72.5°	200.0	186.9	148.5	127.9	122.1	112.2	136.6	319.0	437.2	704.3	464.9
75°	180.7	169.9	134.9	116.7	106.8	91.1	100.8	152.9	188.4	269.6	215.8
77.5°	159.0	150.4	121.1	107.3	94.0	74.4	77.0	103.6	116.4	151.9	125.0
80°	112.5	115.6	105.7	94.5	82.8	60.0	59.2	76.0	83.6	102.1	84.1
82.5°	77.5	79.9	86.1	74.7	66.8	46.7	43.6	52.7	56.7	61.6	40.7
85°	55.3	53.8	59.7	53.5	49.1	29.8	27.9	33.5	35.8	37.5	19.5
87.5°	33.7	33.5	34.5	27.6	25.6	15.1	13.8	16.0	17.0	16.5	9.4
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°	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1	1115.1
2.5°	1113.3	1100.5	1072.6	1050.2	1025.9	1007.3	988.8	978.4	966.9	960.3	959.5
5°	1125.6	1099.5	1039.9	984.6	927.7	876.6	826.4	789.4	759.1	741.8	740.8
7.5°	1139.2	1098.1	1006.3	910.5	809.3	708.5	619.4	556.5	516.1	497.3	495.9
10°	1149.6	1092.7	965.4	816.3	655.7	522.6	441.7	404.6	392.3	389.2	388.7
12.5°	1162.2	1088.8	913.6	695.4	501.1	397.8	373.3	370.9	373.6	375.1	375.4
15°	1173.8	1081.3	843.9	561.5	392.3	355.6	356.1	361.0	366.2	368.6	368.9
17.5°	1179.4	1062.6	752.3	442.4	343.3	336.4	342.5	349.0	353.7	355.6	355.6
20°	1179.4	1033.0	646.1	358.4	317.7	319.0	326.3	331.2	332.3	330.7	329.9
22.5°	1174.4	996.1	542.7	312.7	296.8	301.8	307.5	304.1	291.8	282.4	280.6
25°	1169.9	952.6	443.2	284.8	278.5	285.1	282.7	259.5	240.7	231.0	229.4
27.5°	1162.7	899.8	360.3	261.8	260.8	266.0	242.7	220.3	210.9	205.7	204.7
30°	1160.8	842.6	301.5	241.4	243.3	236.0	209.4	202.0	200.0	197.1	195.8
32.5°	1166.9	785.4	264.7	224.7	226.6	202.5	192.4	193.4	193.1	189.6	188.2
35°	1183.2	729.9	241.2	209.6	204.4	181.5	182.7	185.9	185.9	181.5	179.8
37.5°	1212.0	678.2	226.3	196.8	178.8	170.4	173.9	178.0	178.0	174.9	173.6
40°	1242.6	627.8	215.1	186.7	162.6	162.9	166.3	169.4	170.7	171.2	170.2
42.5°	1270.2	575.6	203.1	175.6	155.3	157.1	158.8	161.0	166.5	170.2	169.7
45°	1286.4	523.1	190.1	162.1	150.4	151.1	150.6	154.8	161.3	166.8	166.8
47.5°	1301.3	480.1	179.3	148.5	145.4	145.4	143.8	148.0	154.1	160.5	161.0
50°	1315.4	452.1	171.8	138.1	139.1	138.3	137.8	141.8	149.9	157.6	159.0
52.5°	1329.7	442.7	165.0	130.5	132.6	131.6	132.1	137.6	146.7	154.8	156.1
55°	1349.8	448.8	157.9	125.3	126.3	126.1	128.2	134.4	142.5	150.6	151.1
57.5°	1374.6	470.7	151.9	121.4	120.3	121.9	125.3	131.3	139.1	148.8	149.6
58°	1379.6	475.9	150.9	120.3	119.1	121.4	124.8	130.5	138.6	148.8	149.6
60°	1387.1	494.4	148.2	118.3	114.6	118.8	123.0	128.7	137.6	150.1	151.7
62.5°	1350.6	498.1	147.5	115.9	109.9	115.1	120.1	126.6	136.6	154.6	157.9
65°	1224.0	460.4	142.0	112.0	106.0	112.2	117.4	125.0	139.6	167.9	169.4
67.5°	982.5	382.4	128.7	106.0	101.6	108.8	115.4	125.0	141.0	169.9	170.9
70°	675.6	287.4	112.0	99.4	96.4	104.6	114.6	127.9	136.6	160.8	157.6
72.5°	352.9	200.0	98.1	91.9	90.0	101.1	122.1	125.0	131.3	150.1	147.0
75°	177.8	136.0	86.4	83.3	83.0	99.7	136.8	120.3	125.8	141.3	148.0
77.5°	105.0	106.5	77.0	75.2	76.5	97.4	137.1	115.6	119.6	130.0	137.3
80°	71.8	88.0	69.7	69.2	70.2	89.5	126.3	109.9	112.2	123.0	130.7
82.5°	40.5	48.6	61.1	64.4	63.9	73.3	109.1	99.9	102.8	145.4	153.7
85°	19.5	29.3	51.1	60.3	54.5	48.8	88.8	88.8	89.5	104.1	105.5
87.5°	7.3	13.1	34.5	47.8	38.2	29.3	60.3	62.9	70.0	72.0	73.7
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)