

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: P271259

Luminaire Tested: **XNV-AF-01-LED-U-T2-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271259  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24136)  
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-T2-7027-800  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4155.6 lumens  
Efficiency: N/A  
Efficacy: 94.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B1 - U0 - G1

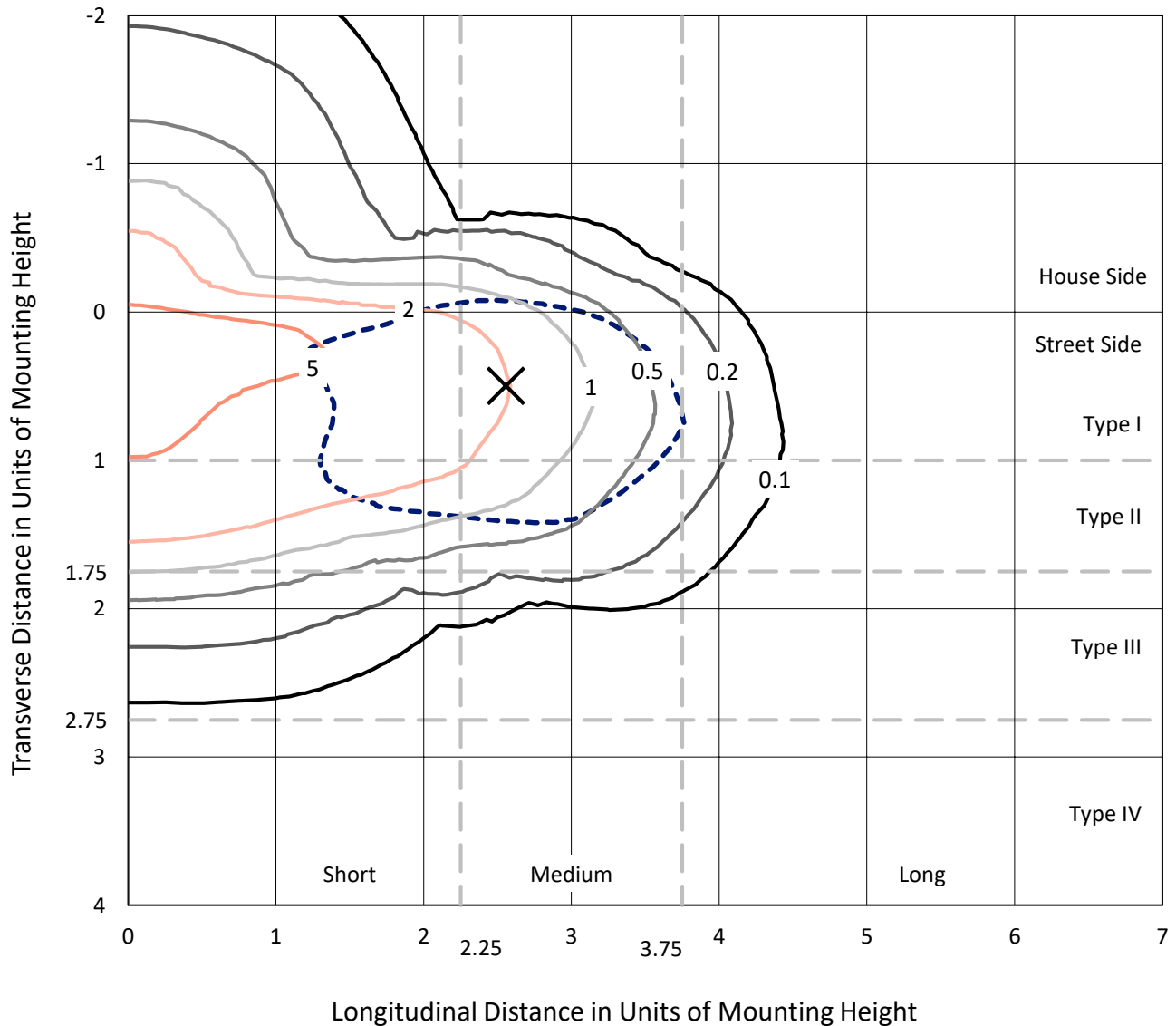
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

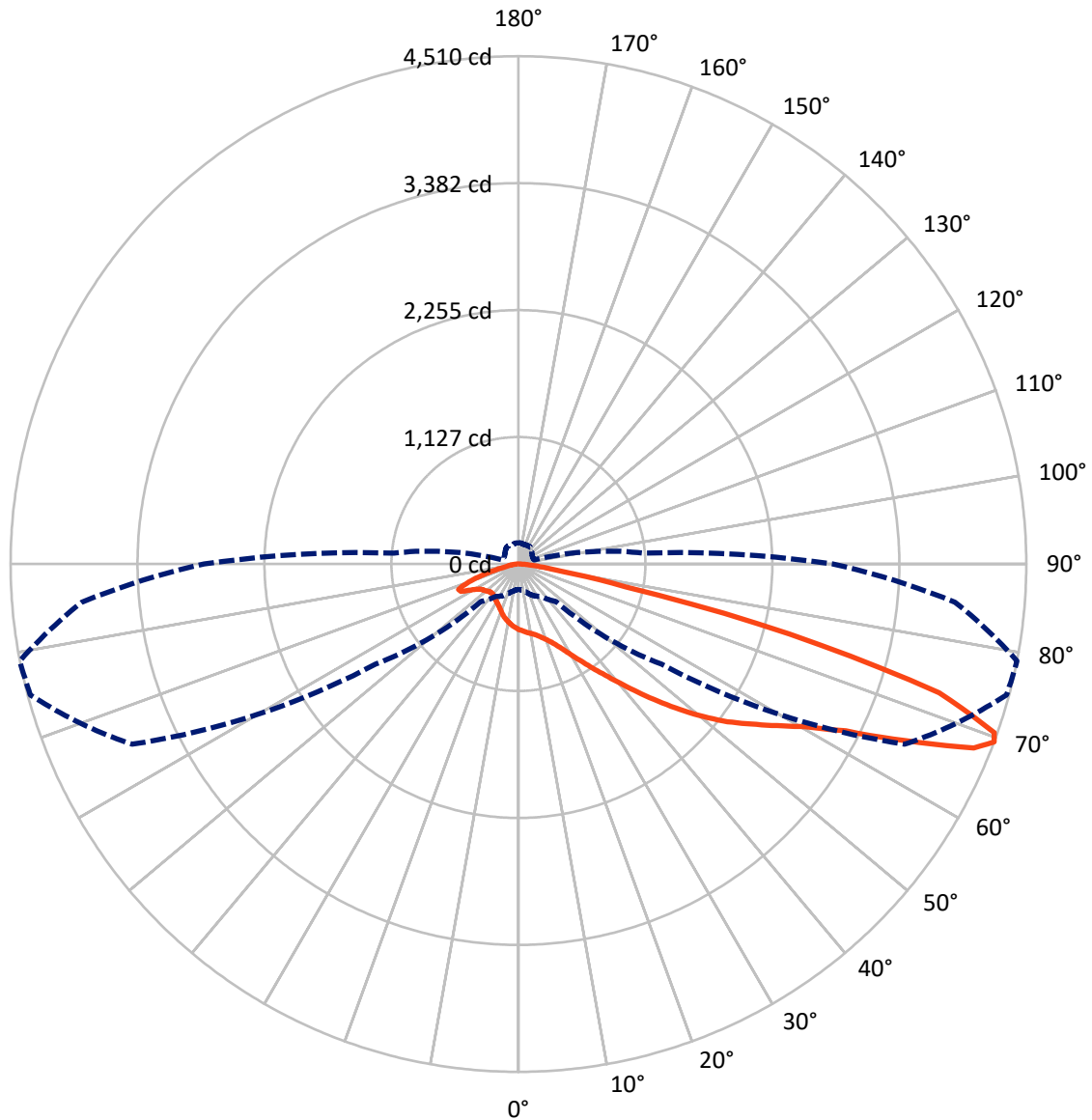
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	781.7	0.0	781.7
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	3373.8	0.0	3373.8
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	4155.6	0.0	4155.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.1	1.3
10°-20°	155.0	3.7
20°-30°	256.1	6.2
30°-40°	414.7	10.0
40°-50°	662.5	15.9
50°-60°	948.8	22.8
60°-70°	1057.1	25.4
70°-80°	528.8	12.7
80°-90°	78.5	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°	4155.6	100.0
0°-180°	4155.6	100.0



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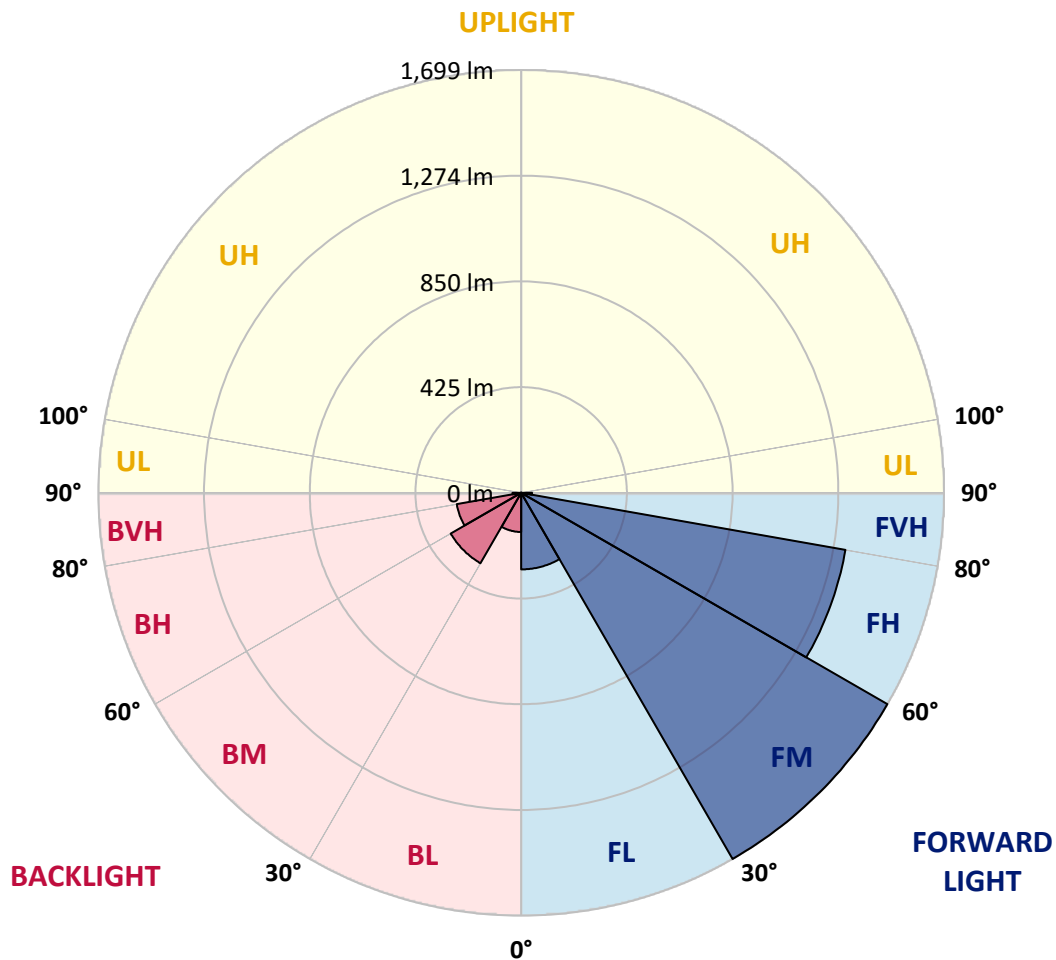
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	307.7	7.4			
FM	(30°-60°)	1699.2	40.9			
FH	(60°-80°)	1323.1	31.8			G1/1800
FVH	(80°-90°)	43.8	1.1			G1/100
BL	(0°-30°)	157.5	3.8	B1/500		
BM	(30°-60°)	326.8	7.9	B1/1000		
BH	(60°-80°)	262.8	6.3	B1/500		G1/500
BVH	(80°-90°)	34.6	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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2
2.5°	640.2	638.9	638.6	634.6	632.3	627.7	616.9	605.7	595.3	589.9	584.3
5°	693.9	691.1	689.7	682.9	677.0	666.6	649.6	631.8	613.4	603.8	592.4
7.5°	726.2	726.4	726.4	721.0	715.1	702.6	680.7	656.7	629.2	616.5	598.7
10°	728.9	729.2	733.2	734.6	735.9	729.5	709.3	678.8	643.5	627.1	603.8
12.5°	701.9	703.9	710.6	720.4	734.4	741.5	732.7	702.7	662.1	642.2	613.6
15°	665.9	667.7	676.5	691.3	713.7	737.2	749.5	730.2	686.1	662.8	628.0
17.5°	648.1	650.4	656.3	668.2	690.0	721.8	758.4	759.5	714.7	687.8	645.2
20°	639.8	641.3	648.9	658.7	675.3	705.8	759.3	790.6	748.7	717.4	666.1
22.5°	658.9	659.5	663.4	668.8	679.9	703.4	758.8	822.7	791.1	754.8	693.0
25°	715.6	712.0	709.3	702.6	705.2	721.8	767.5	857.0	845.6	803.7	728.9
27.5°	782.5	782.0	774.8	759.1	748.9	759.5	792.2	895.3	912.0	865.8	776.0
30°	857.0	857.3	849.8	830.6	810.2	811.3	831.7	939.5	991.8	941.0	833.8
32.5°	935.0	939.8	926.2	907.0	882.2	874.3	888.2	993.2	1084.0	1029.5	901.0
35°	1028.2	1029.0	1014.0	985.8	961.0	948.6	961.4	1060.0	1190.3	1133.8	982.8
37.5°	1124.9	1125.5	1110.0	1073.8	1042.7	1034.5	1048.6	1141.2	1302.8	1252.2	1079.0
40°	1204.1	1209.7	1197.6	1163.7	1132.0	1127.2	1147.6	1238.7	1446.6	1392.6	1193.5
42.5°	1293.7	1300.3	1285.7	1250.4	1225.3	1223.8	1255.6	1349.6	1589.6	1554.8	1323.3
45°	1395.0	1404.2	1383.7	1344.1	1322.9	1358.7	1360.8	1472.4	1754.4	1736.5	1469.2
47.5°	1505.3	1512.9	1496.3	1453.6	1430.6	1482.6	1463.8	1605.5	1932.4	1931.0	1627.1
50°	1590.4	1598.9	1600.5	1581.7	1557.5	1564.0	1576.9	1745.1	2109.9	2131.1	1790.5
52.5°	1575.0	1583.2	1619.9	1669.1	1707.9	1691.0	1706.5	1893.5	2281.5	2326.4	1945.8
55°	1449.9	1454.3	1523.0	1639.9	1805.6	1885.9	1887.1	2055.1	2444.6	2507.4	2093.1
57.5°	1224.5	1225.1	1314.5	1486.9	1748.7	2012.5	2171.9	2257.9	2614.8	2707.5	2275.9
60°	866.4	868.7	972.8	1198.1	1545.1	1997.1	2478.3	2620.8	2812.0	2932.3	2511.2
62.5°	514.4	519.3	597.8	778.7	1147.6	1801.5	2659.4	3266.4	3102.2	3262.1	2888.1
65°	334.7	338.8	385.8	476.6	678.0	1310.6	2599.9	3891.7	3651.8	3780.8	3429.5
67.5°	257.8	261.0	298.0	352.9	415.9	708.6	2078.7	4022.9	4320.6	4360.8	3886.6
69°	226.5	229.2	256.3	309.0	350.2	468.9	1549.0	3785.0	4487.8	4509.9	3892.4
70°	209.8	212.1	237.6	283.2	321.7	374.4	1185.7	3508.8	4426.6	4482.8	3780.1
72.5°	173.0	174.8	193.0	228.1	262.9	266.6	525.2	2562.1	3727.3	3907.3	3198.9
75°	144.4	145.4	157.5	183.0	212.9	212.3	268.4	1451.2	2274.5	2488.9	1975.2
77.5°	120.5	121.2	129.1	144.8	168.1	167.3	189.0	626.4	1004.2	968.9	679.9
80°	106.3	106.9	110.9	115.1	129.6	128.8	140.0	287.6	408.5	377.6	257.2
82.5°	80.8	81.8	102.4	104.5	100.6	97.0	97.6	167.4	209.3	190.6	138.1
85°	45.6	46.0	65.8	77.0	87.6	65.8	63.3	86.4	103.3	90.5	60.4
87.5°	20.4	21.2	31.5	36.4	47.3	38.5	36.1	36.7	44.6	37.0	24.0
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°	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2
2.5°	578.8	574.1	563.2	552.2	541.0	534.0	526.5	519.8	517.2	516.9	511.7
5°	581.3	570.3	545.6	518.4	492.6	472.5	455.7	444.8	434.2	432.3	427.7
7.5°	582.1	564.5	524.3	480.7	441.2	413.5	396.6	389.3	384.1	382.8	381.2
10°	581.8	556.8	500.3	440.7	395.9	375.0	368.7	370.3	372.4	373.5	373.5
12.5°	586.1	553.3	476.3	403.2	366.5	356.4	361.3	369.7	376.3	378.9	379.5
15°	594.0	551.1	450.0	370.6	345.8	348.3	360.2	372.4	381.7	385.8	386.9
17.5°	603.8	548.1	419.5	343.6	333.9	342.3	357.7	373.2	384.5	389.5	390.5
20°	614.7	543.7	388.0	323.5	323.3	333.9	349.4	366.8	378.7	384.5	384.1
22.5°	629.4	539.6	358.7	308.8	311.5	321.4	334.1	349.9	361.1	366.1	365.2
25°	648.9	535.8	332.3	295.8	298.2	304.7	313.8	325.6	333.6	336.2	334.3
27.5°	675.3	532.9	311.5	283.9	283.5	286.6	291.9	298.4	302.3	301.6	298.4
30°	707.7	529.9	296.4	273.3	269.4	269.1	271.6	275.4	277.8	272.9	270.5
32.5°	743.8	524.7	282.7	264.0	257.2	254.7	255.8	261.0	271.1	266.2	264.2
35°	786.6	518.7	269.1	254.0	248.8	244.1	245.0	256.0	286.6	283.1	281.1
37.5°	837.8	513.3	256.6	243.0	242.8	237.1	236.6	249.9	290.6	283.1	281.3
40°	899.7	512.3	245.4	231.0	235.4	233.3	231.4	239.5	268.1	252.6	249.5
42.5°	974.1	517.2	237.3	219.6	227.0	232.2	228.7	230.5	242.3	228.3	226.0
45°	1061.1	530.4	231.4	209.7	218.1	231.4	227.4	225.7	227.5	219.9	218.3
47.5°	1162.5	554.1	227.4	201.2	209.7	229.2	226.7	223.5	222.7	218.3	217.2
50°	1271.0	585.9	224.5	193.6	201.9	225.4	226.5	221.8	220.4	218.6	218.1
52.5°	1378.7	620.4	221.3	187.0	195.7	220.8	226.7	220.3	218.3	217.2	216.8
55°	1485.7	656.3	215.4	181.4	191.1	215.4	226.5	218.1	215.9	215.9	215.9
57.5°	1624.7	711.0	207.5	176.6	185.1	208.2	222.9	215.7	212.5	212.9	213.2
60°	1825.4	802.5	198.7	171.5	177.2	200.1	217.5	211.2	207.7	208.8	209.0
62.5°	2160.6	962.8	186.8	164.2	169.2	191.3	210.5	205.3	201.9	203.8	204.2
65°	2607.5	1156.6	170.9	155.0	160.6	181.5	201.5	198.2	194.7	199.2	199.1
67.5°	2880.1	1213.3	154.4	145.2	152.5	171.2	190.4	189.0	186.5	194.7	194.2
69°	2790.8	1110.6	144.8	138.9	146.9	164.2	183.3	182.6	180.7	188.6	188.1
70°	2651.8	1014.6	138.9	134.8	143.8	159.9	178.7	178.7	176.6	183.6	182.1
72.5°	2130.2	752.5	125.0	124.5	133.5	148.0	166.0	167.4	166.4	168.8	167.4
75°	1250.6	453.5	111.5	113.0	121.0	135.1	152.3	153.3	152.3	152.0	152.3
77.5°	433.6	203.3	98.5	100.9	107.6	122.1	137.0	139.1	137.6	135.6	136.3
80°	169.6	118.2	84.4	87.9	93.6	107.3	121.8	123.2	120.7	120.5	118.2
82.5°	102.0	72.0	65.5	71.2	78.3	93.2	105.2	104.7	102.8	113.9	99.8
85°	44.3	40.0	47.9	53.5	57.1	69.9	88.9	86.4	81.8	72.0	70.3
87.5°	18.0	20.8	26.4	31.8	34.2	45.2	60.8	58.7	59.6	49.0	48.7
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)