

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: P271231

Luminaire Tested: **XNV-AF-01-LED-U-SL2-7027-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271231  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)  
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-SL2-7027-1200-HSS  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4702.3 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 66  
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

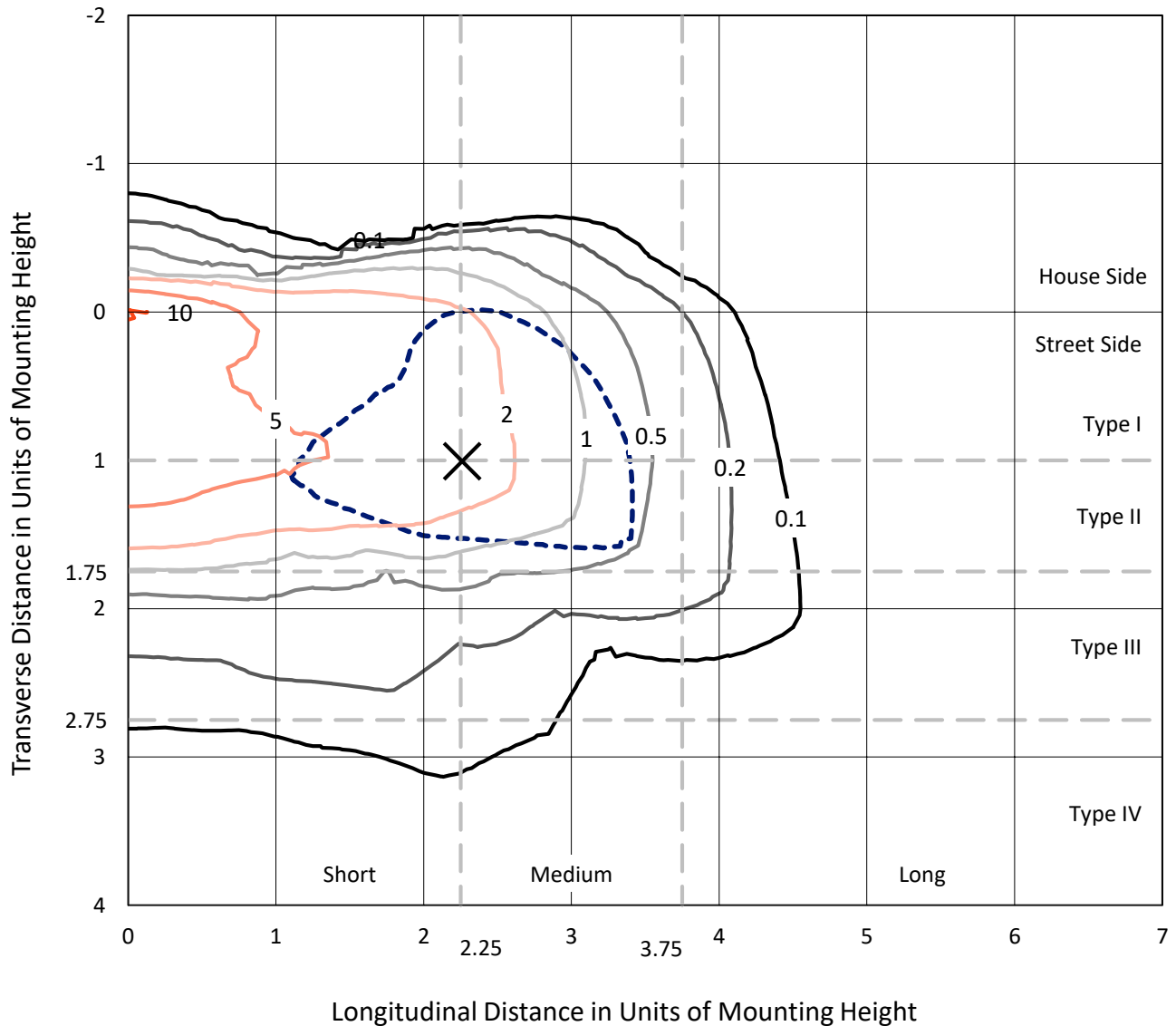


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

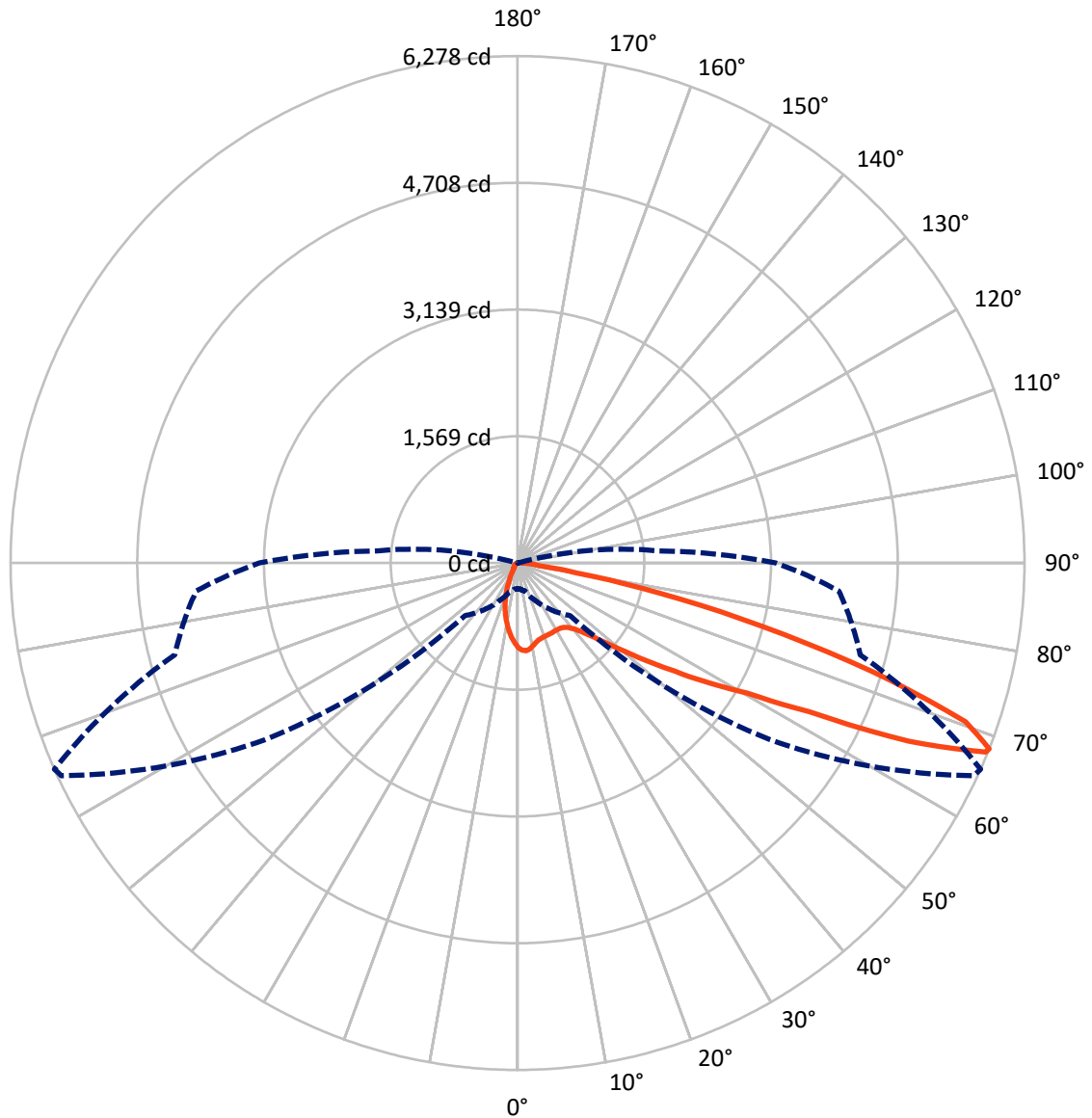


Based on 10 foot mounting height. Maximum calculated value = 10.5 fc  
 Type II - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	476.3	0.0	476.3
	% Fixture	10.1	0.0	10.1
<b>Street Side</b>	Lumens	4226.0	0.0	4226.0
	% Fixture	89.9	0.0	89.9
<b>Total</b>	Lumens	4702.3	0.0	4702.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.9	1.8
10°-20°	184.8	3.9
20°-30°	267.8	5.7
30°-40°	409.9	8.7
40°-50°	701.1	14.9
50°-60°	1096.8	23.3
60°-70°	1262.9	26.9
70°-80°	632.0	13.4
80°-90°	61.2	1.3
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°	4702.3	100.0
0°-180°	4702.3	100.0



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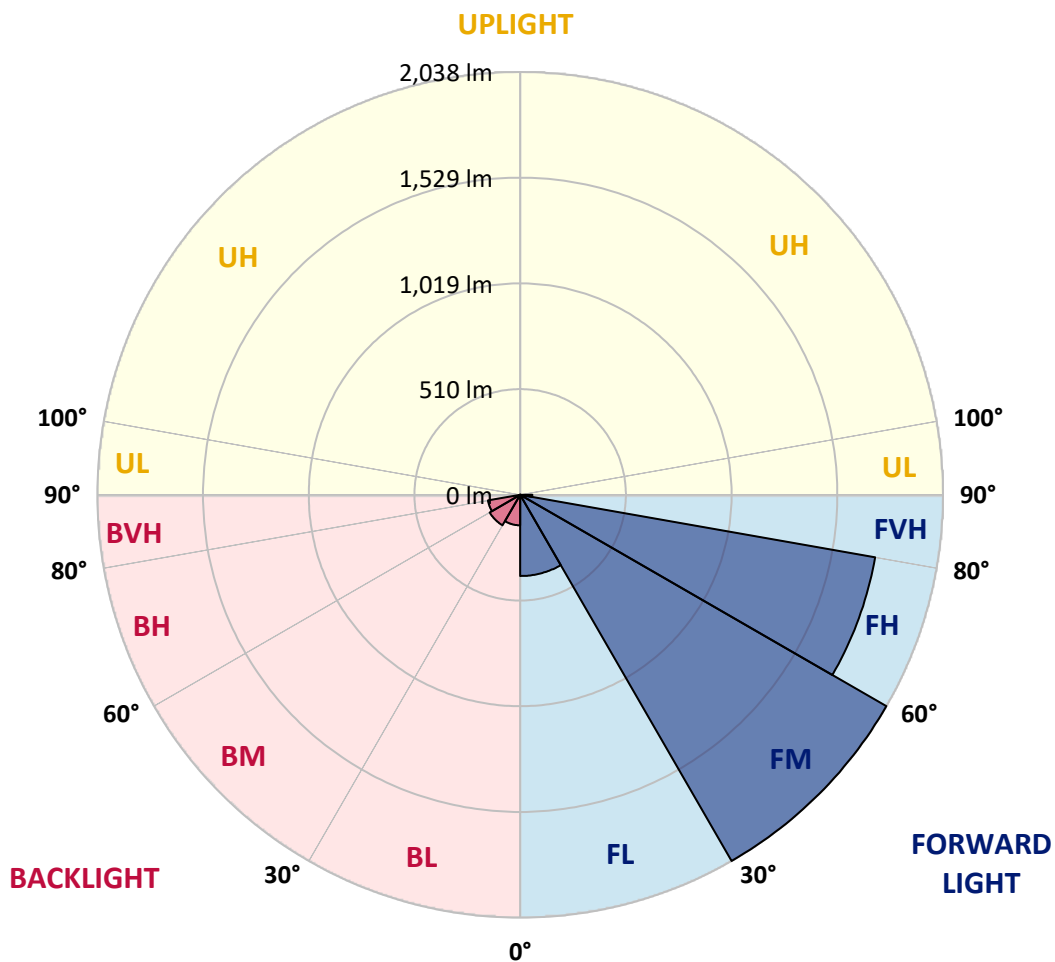
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	391.4	8.3			
FM	(30°-60°)	2038.2	43.3			
FH	(60°-80°)	1737.5	36.9			G1/1800
FVH	(80°-90°)	58.9	1.3			G1/100
BL	(0°-30°)	147.0	3.1	B1/500		
BM	(30°-60°)	169.6	3.6	B0/220		
BH	(60°-80°)	157.4	3.3	B1/500		G1/500
BVH	(80°-90°)	2.3	0.0			G0/10
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°	66°	75°	85°
0°	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7
2.5°	1102.0	1102.6	1102.3	1103.4	1102.6	1097.1	1091.3	1078.7	1079.8	1063.6	1045.4
5°	1024.3	1030.6	1037.0	1043.2	1058.4	1071.6	1087.5	1091.3	1091.3	1077.2	1050.6
7.5°	945.3	945.7	952.7	961.2	981.6	1005.9	1042.8	1076.0	1076.8	1080.5	1051.3
10°	886.0	887.7	892.6	901.8	922.1	946.2	987.4	1039.5	1043.7	1070.9	1043.9
12.5°	839.7	842.0	847.2	857.9	876.3	901.1	944.7	1004.0	1009.7	1061.6	1041.8
15°	804.3	807.2	811.3	822.0	842.0	868.2	915.8	980.4	987.1	1057.9	1048.7
17.5°	789.6	789.6	789.3	796.5	816.5	843.1	892.9	968.0	976.4	1060.9	1060.5
20°	795.9	794.8	787.0	785.2	797.3	823.9	874.9	959.7	969.5	1066.5	1074.9
22.5°	829.0	826.9	809.6	795.1	791.4	809.2	862.7	954.2	965.7	1077.8	1094.1
25°	899.7	892.9	869.0	836.5	807.2	805.5	854.2	951.2	963.4	1091.3	1115.2
27.5°	991.1	989.4	950.9	907.4	851.2	817.6	851.7	949.1	961.2	1100.8	1132.1
30°	1104.8	1105.5	1061.3	1004.5	919.5	852.0	859.8	947.9	960.5	1101.5	1139.5
32.5°	1222.2	1223.0	1186.0	1125.1	1012.8	911.1	882.7	953.1	964.6	1098.5	1139.2
35°	1335.2	1336.3	1314.1	1265.1	1137.8	992.9	925.9	970.9	979.0	1100.5	1138.4
37.5°	1478.0	1482.5	1455.2	1409.4	1294.2	1113.3	996.3	1006.6	1013.3	1115.5	1144.0
40°	1721.7	1715.8	1637.5	1559.9	1464.0	1260.0	1098.2	1068.4	1070.5	1154.7	1165.0
42.5°	2005.6	1998.2	1864.2	1730.6	1638.6	1436.7	1228.5	1162.8	1162.4	1220.3	1210.7
45°	2250.0	2245.6	2104.5	1926.1	1832.1	1632.0	1389.0	1298.9	1294.5	1334.1	1294.2
47.5°	2423.4	2419.8	2313.0	2134.4	2055.7	1846.8	1589.6	1484.7	1475.5	1482.8	1429.7
50°	2440.3	2436.4	2399.1	2284.2	2317.1	2162.1	1837.3	1728.0	1716.1	1704.8	1634.6
52.5°	2281.7	2281.2	2300.9	2293.5	2500.3	2567.7	2141.0	2028.8	2014.8	1985.7	1915.8
55°	1957.1	1955.3	2029.5	2137.3	2496.1	2986.3	2604.2	2386.8	2368.4	2310.1	2218.5
57.5°	1430.0	1420.5	1575.4	1803.9	2320.9	3169.4	3340.0	2831.6	2801.1	2616.1	2475.1
60°	789.6	793.4	992.5	1263.1	1905.6	3133.3	4017.0	3350.3	3269.8	2880.1	2737.9
62.5°	442.7	451.8	600.2	821.1	1214.9	2839.8	4380.2	4243.0	4049.1	3187.9	3070.1
65°	334.8	340.4	414.8	633.5	766.0	1984.4	4438.2	5491.0	5323.7	3654.6	3599.1
67.5°	315.2	319.6	356.2	525.2	697.7	1029.2	4001.9	6229.2	6250.2	4290.9	4008.9
68°	317.6	323.0	359.5	505.3	696.5	920.7	3815.8	6233.0	6277.6	4393.5	3994.9
70°	291.6	293.0	380.3	495.8	675.2	725.3	2760.4	5805.8	5886.0	4515.7	3626.5
72.5°	111.5	111.8	170.6	429.3	707.2	729.5	1390.5	4588.8	4592.9	3929.8	2827.2
75°	57.9	48.7	53.4	134.3	675.5	711.0	697.7	3133.3	3113.7	2657.8	1732.4
77.5°	39.9	34.0	35.8	46.5	280.9	710.6	503.9	1801.8	1797.7	1130.6	494.2
80°	22.5	19.6	21.4	39.2	98.5	667.0	469.5	774.5	729.9	198.5	80.0
82.5°	11.5	9.6	11.5	32.9	61.3	419.7	456.6	303.7	270.6	47.3	52.0
85°	3.0	3.0	5.5	22.8	38.0	137.7	409.4	219.2	197.1	20.8	36.9
87.5°	0.8	0.4	2.2	8.5	13.7	30.0	227.0	122.2	105.2	10.7	21.4
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°	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7	1047.7
2.5°	1038.0	1027.8	1007.4	984.5	968.3	950.5	940.2	927.7	918.1	909.5	915.8
5°	1034.3	1014.4	969.5	918.7	876.3	835.8	805.5	776.7	754.8	741.2	746.9
7.5°	1024.7	995.2	922.1	843.1	773.7	708.4	655.3	607.7	570.8	550.8	556.9
10°	1008.4	966.8	868.7	759.0	662.0	569.5	490.6	419.7	366.1	341.0	346.9
12.5°	996.7	941.7	813.2	677.7	550.0	419.0	314.1	232.9	191.2	166.0	168.3
15°	991.5	922.1	761.6	592.2	427.9	269.1	169.8	122.9	108.5	103.3	103.8
17.5°	992.3	906.6	712.4	503.1	304.5	154.7	104.2	93.8	91.5	90.4	90.4
20°	994.2	891.1	661.5	410.4	194.9	99.6	86.7	83.5	82.4	80.8	81.1
22.5°	999.6	879.4	610.2	317.6	120.0	81.1	76.7	73.8	72.0	69.8	70.2
25°	1008.1	870.5	559.6	228.4	84.5	70.8	66.8	62.7	59.5	56.9	57.2
27.5°	1013.3	857.9	505.7	155.8	70.2	62.1	56.5	50.9	47.3	45.0	44.6
30°	1009.7	837.6	444.4	102.2	62.1	53.4	46.9	40.7	36.9	35.0	35.0
32.5°	999.6	811.3	376.8	74.6	54.9	46.2	38.0	32.5	30.0	28.7	29.1
35°	988.1	784.0	305.0	63.2	49.4	39.2	31.0	26.6	25.5	25.2	25.2
37.5°	981.8	760.4	235.9	57.2	44.2	32.5	25.5	22.8	21.7	21.7	21.7
40°	988.9	742.3	174.6	52.8	39.2	26.9	21.4	19.6	19.3	19.3	19.3
42.5°	1018.9	736.2	127.6	49.0	34.0	22.5	18.4	17.0	16.6	17.0	17.0
45°	1077.2	749.7	96.7	45.5	29.1	18.4	15.9	14.7	14.7	15.1	15.1
47.5°	1176.2	784.8	79.4	41.7	24.3	15.5	13.7	12.9	12.9	13.2	13.2
50°	1329.6	849.7	71.2	37.6	20.3	13.2	11.5	11.0	11.0	11.5	11.8
52.5°	1563.0	973.5	67.3	33.5	16.6	11.0	9.6	9.3	9.6	10.1	10.1
55°	1822.4	1131.8	62.4	29.6	14.1	9.3	7.7	7.7	8.2	8.9	8.9
57.5°	2064.2	1284.5	57.9	24.3	12.1	7.4	6.3	6.3	6.9	7.7	7.7
60°	2319.8	1434.5	52.0	19.6	10.3	5.8	5.2	5.2	6.3	6.9	7.4
62.5°	2635.3	1608.8	44.2	15.5	8.2	4.4	3.8	4.9	5.8	6.9	6.9
65°	3091.5	1825.4	34.8	12.1	6.3	3.4	3.0	4.4	5.5	6.6	6.9
67.5°	3257.3	1797.7	26.2	10.1	4.9	2.5	2.5	4.0	5.5	6.6	6.6
68°	3196.8	1737.2	25.2	9.6	4.4	2.5	2.5	4.0	5.5	6.6	6.6
70°	2785.6	1420.1	20.8	7.4	3.8	2.2	2.2	3.8	5.5	6.3	6.6
72.5°	2085.7	943.5	17.7	4.9	3.4	2.2	1.8	3.8	5.2	6.3	6.3
75°	1196.5	391.7	15.1	3.8	3.0	1.8	1.8	3.4	5.2	6.3	6.3
77.5°	338.1	91.5	12.1	3.0	2.5	1.8	1.4	3.4	4.9	5.8	5.8
80°	62.1	27.3	9.6	2.5	2.2	1.8	1.4	3.4	4.9	5.8	5.8
82.5°	41.0	12.9	6.9	2.5	2.2	1.8	1.4	3.0	4.4	5.5	5.5
85°	30.6	9.3	4.4	2.5	2.2	1.8	1.4	3.0	4.4	5.5	5.5
87.5°	17.0	4.0	3.4	3.0	2.5	1.8	1.4	2.5	4.0	5.2	5.2
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)