

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: P198573

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198573  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-SL4-7030-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8227 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 85  
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

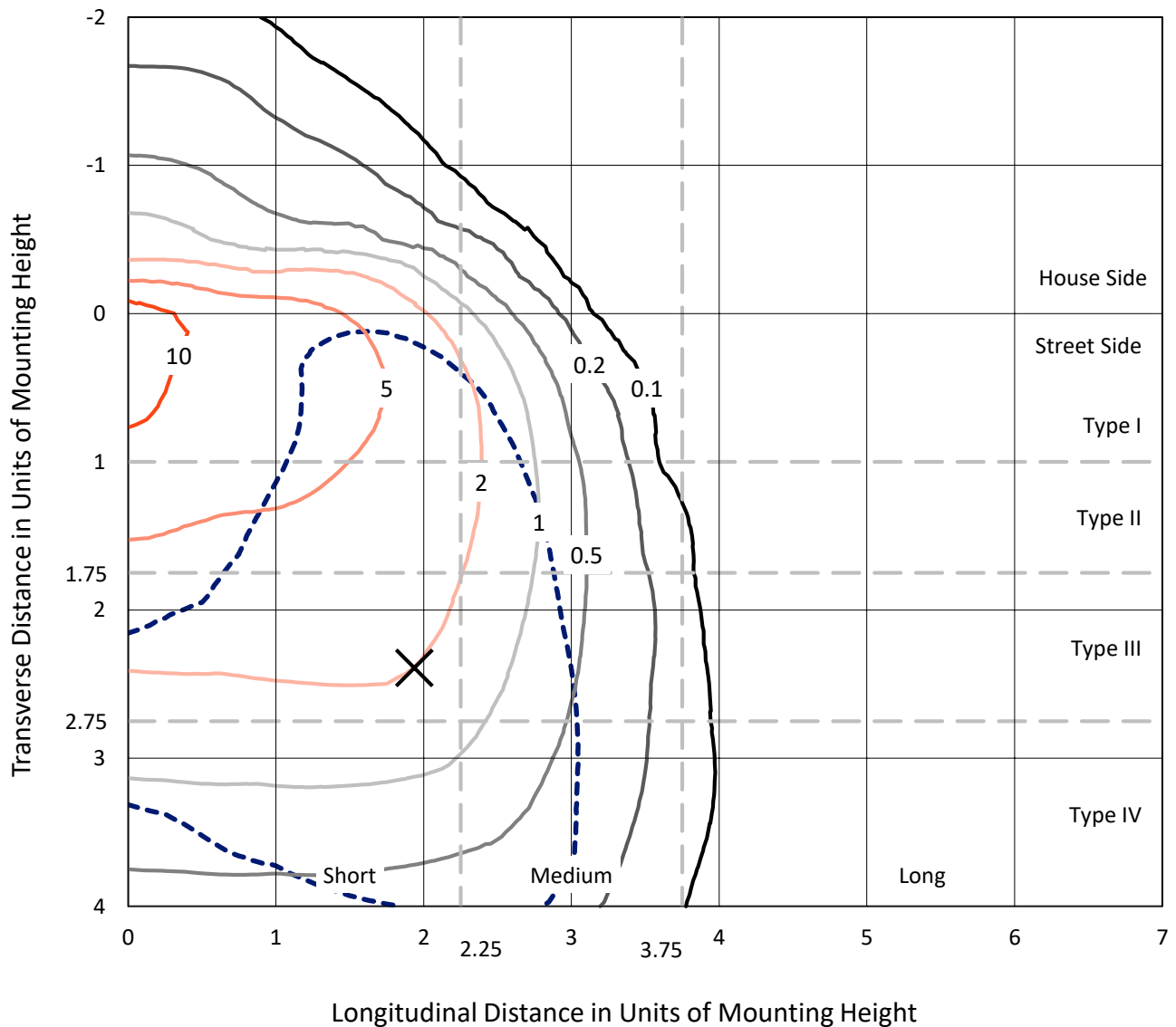


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

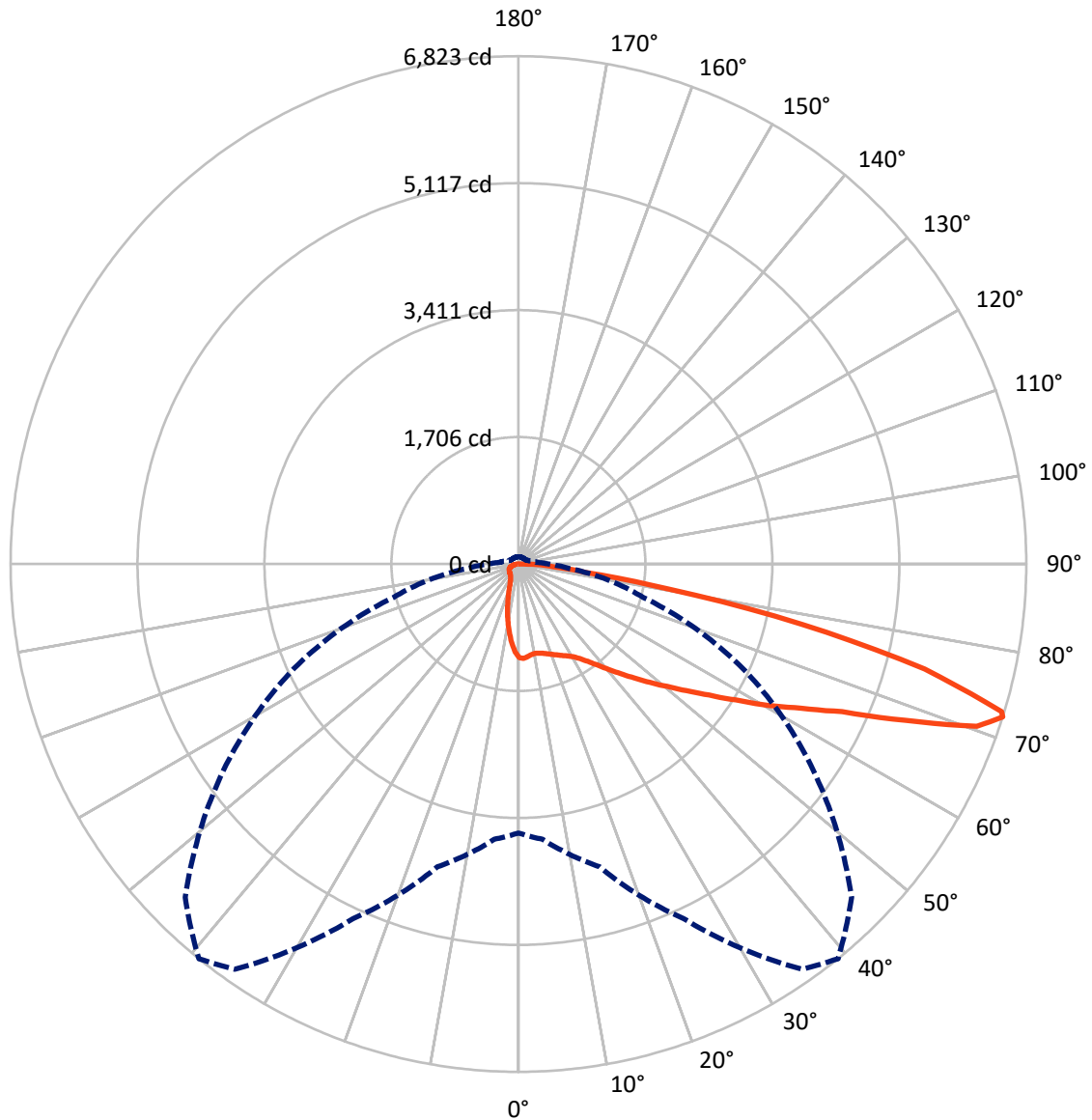


Based on 10 foot mounting height. Maximum calculated value = 12.6 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	943.3	0.0	943.3
	% Fixture	11.5	0.0	11.5
<b>Street Side</b>	Lumens	7283.7	0.0	7283.7
	% Fixture	88.5	0.0	88.5
<b>Total</b>	Lumens	8227.0	0.0	8227.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.0	1.3
10°-20°	271.3	3.3
20°-30°	422.8	5.1
30°-40°	651.0	7.9
40°-50°	1061.2	12.9
50°-60°	1649.1	20.0
60°-70°	2207.2	26.8
70°-80°	1587.3	19.3
80°-90°	269.1	3.3
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°	8227.0	100.0
0°-180°	8227.0	100.0



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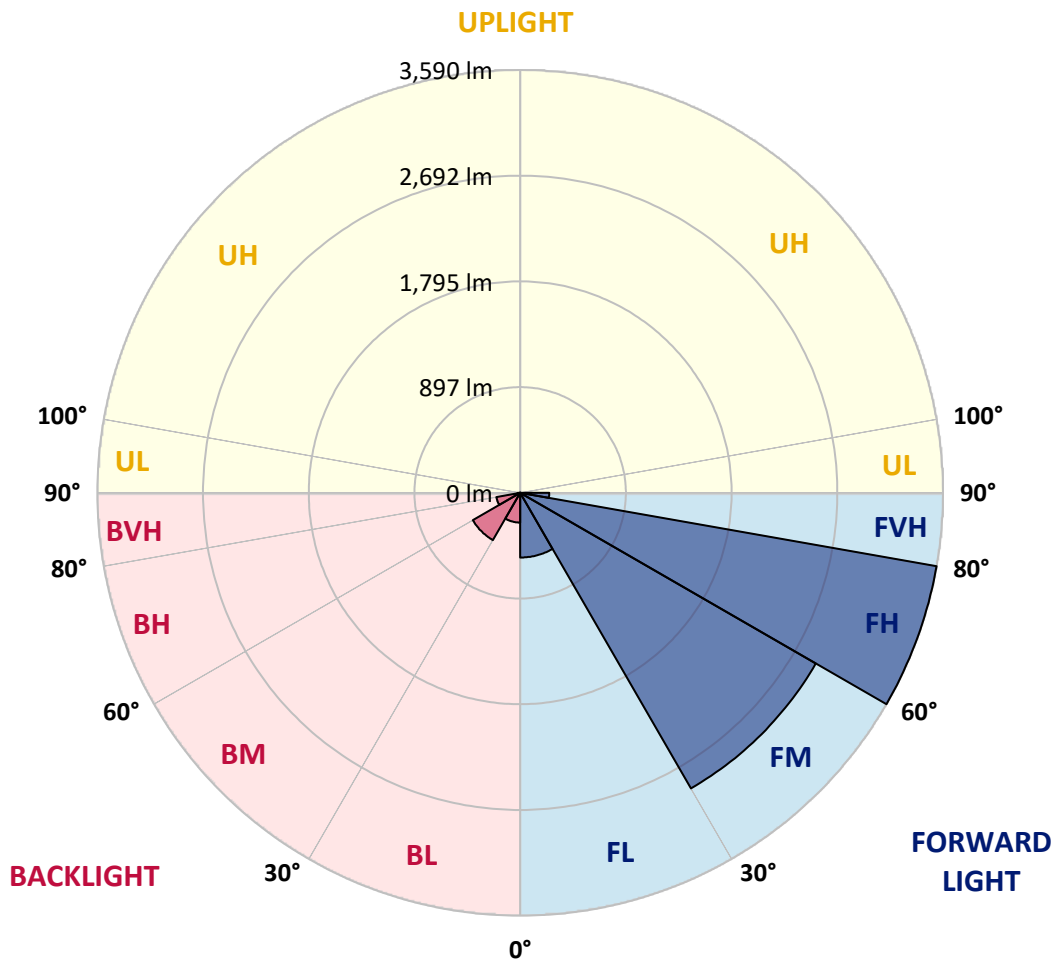
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	549.5	6.7			
FM	(30°-60°)	2897.7	35.2			
FH	(60°-80°)	3589.6	43.6			G2/5000
FVH	(80°-90°)	246.8	3.0			G3/500
BL	(0°-30°)	252.5	3.1	B1/500		
BM	(30°-60°)	463.6	5.6	B1/1000		
BH	(60°-80°)	205.0	2.5	B1/500		G1/500
BVH	(80°-90°)	22.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4
2.5°	1283.5	1284.0	1282.4	1277.4	1273.0	1270.8	1266.9	1260.3	1251.4	1245.4	1240.4
5°	1271.3	1273.0	1271.9	1263.6	1255.9	1251.4	1245.4	1236.0	1224.4	1219.4	1207.8
7.5°	1261.9	1263.0	1259.7	1250.3	1235.4	1229.9	1218.9	1206.7	1196.2	1189.0	1175.2
10°	1255.3	1256.4	1253.6	1244.3	1227.7	1221.1	1207.8	1194.6	1180.7	1171.9	1156.5
12.5°	1245.9	1248.1	1248.1	1243.7	1232.7	1228.2	1215.0	1200.6	1187.9	1178.5	1159.2
15°	1244.3	1247.0	1252.0	1251.4	1248.1	1244.8	1234.3	1220.0	1208.9	1197.9	1174.1
17.5°	1258.1	1264.1	1274.1	1277.4	1275.2	1268.0	1255.9	1242.6	1230.5	1220.0	1190.7
20°	1292.9	1296.2	1311.1	1317.7	1306.7	1296.2	1280.2	1263.0	1252.0	1243.7	1206.2
22.5°	1345.3	1349.7	1361.9	1362.4	1339.3	1326.5	1306.1	1285.1	1274.6	1271.3	1227.1
25°	1429.3	1428.2	1431.5	1417.7	1375.7	1360.8	1335.9	1311.6	1304.5	1311.1	1258.1
27.5°	1529.8	1527.0	1516.5	1480.6	1417.1	1397.8	1368.0	1346.4	1346.4	1361.9	1300.0
30°	1645.8	1643.0	1608.8	1548.6	1466.3	1444.2	1412.7	1390.1	1401.7	1431.5	1356.9
32.5°	1768.4	1758.4	1710.4	1629.7	1536.4	1512.1	1481.7	1458.5	1480.6	1531.4	1438.7
35°	1883.8	1878.3	1819.2	1723.6	1627.0	1606.5	1585.6	1556.8	1592.2	1671.2	1554.1
37.5°	2003.1	1998.7	1926.3	1824.7	1737.4	1723.6	1706.0	1686.1	1743.0	1846.8	1710.4
40°	2136.2	2127.3	2036.2	1934.6	1866.1	1859.5	1850.1	1844.6	1936.3	2090.9	1908.1
42.5°	2286.9	2269.8	2152.2	2055.5	2006.4	2011.9	2006.9	2029.0	2169.3	2372.5	2143.4
45°	2459.3	2425.0	2267.6	2184.2	2161.6	2183.7	2194.2	2250.5	2444.9	2697.8	2406.2
47.5°	2620.5	2576.3	2394.1	2323.9	2336.6	2374.8	2404.6	2504.0	2747.0	3019.3	2674.6
50°	2769.1	2719.4	2529.4	2468.6	2530.5	2584.6	2646.5	2786.7	3068.4	3350.1	2920.9
52.5°	2879.0	2843.1	2664.7	2626.6	2753.1	2824.9	2923.7	3101.0	3393.1	3665.4	3140.8
55°	2964.0	2944.7	2796.7	2807.7	3004.9	3107.6	3227.5	3431.2	3736.6	3948.2	3317.5
57.5°	3062.3	3048.0	2947.5	3026.4	3317.5	3446.7	3588.1	3814.5	4063.6	4197.2	3456.1
60°	3166.2	3166.2	3115.3	3289.9	3708.5	3856.5	3997.3	4173.5	4389.4	4421.5	3512.4
62.5°	3244.6	3265.0	3283.2	3570.4	4079.6	4263.5	4418.1	4587.1	4726.9	4531.9	3379.9
65°	3358.3	3402.0	3504.7	3894.6	4539.1	4779.9	4988.6	5130.6	5000.2	4444.1	2947.5
67.5°	3553.8	3618.5	3837.2	4377.3	5242.7	5603.3	5806.0	5560.8	4946.7	3891.3	2257.7
70°	3730.0	3821.1	4195.0	4989.7	6157.2	6531.7	6438.3	5460.8	4308.2	2852.5	1389.0
72°	3612.9	3712.3	4211.6	5256.5	6646.0	6822.7	6330.7	4839.5	3329.1	1740.8	684.8
72.5°	3536.2	3639.4	4158.0	5249.9	6659.3	6785.7	6181.0	4592.7	3022.0	1523.2	553.9
75°	2954.1	3042.4	3575.4	4652.9	5868.4	5636.5	4823.5	2972.3	1389.0	492.1	285.0
77.5°	1929.1	1996.5	2465.3	3223.6	4110.5	3887.4	2935.9	1391.7	520.8	298.8	214.3
80°	969.2	1017.3	1319.4	1694.9	2218.5	2041.2	1355.3	673.2	348.5	215.9	168.4
82.5°	674.3	718.5	908.5	865.4	927.3	897.4	637.3	561.7	260.7	136.4	88.4
85°	565.5	611.4	751.6	616.9	504.8	460.0	456.7	530.7	172.3	67.4	74.6
87.5°	493.2	562.8	620.2	450.7	346.3	305.4	336.3	486.5	54.7	37.0	22.6
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°	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4
2.5°	1232.1	1230.5	1222.2	1209.5	1200.1	1194.0	1182.4	1181.9	1183.0	1173.0	1176.9
5°	1197.3	1190.7	1169.2	1139.9	1116.1	1093.5	1068.6	1060.4	1053.2	1038.3	1039.9
7.5°	1160.9	1149.3	1111.7	1063.7	1017.8	975.9	934.4	914.0	898.5	879.2	879.2
10°	1139.3	1121.1	1063.7	993.5	920.6	859.3	797.5	760.5	733.4	708.6	706.9
12.5°	1138.2	1110.6	1030.5	933.9	833.9	747.8	663.3	606.4	566.1	536.8	534.0
15°	1147.1	1108.4	1002.9	878.1	752.2	640.1	535.7	463.4	412.0	379.4	376.1
17.5°	1154.8	1105.6	973.1	819.6	672.7	536.3	420.3	345.2	296.6	270.1	267.3
20°	1162.0	1099.6	935.0	757.7	584.9	439.1	328.6	267.9	235.8	220.9	219.3
22.5°	1172.5	1094.0	895.2	688.1	498.7	357.3	271.2	227.5	210.4	203.2	202.1
25°	1189.6	1094.6	856.6	616.9	419.7	297.7	234.7	207.7	198.3	193.3	193.3
27.5°	1214.4	1101.2	818.5	544.5	352.9	256.8	213.2	197.2	191.1	187.2	186.1
30°	1250.9	1113.4	778.1	476.1	299.9	228.6	200.5	190.5	185.6	182.2	181.7
32.5°	1303.9	1134.9	735.6	413.6	259.6	208.8	191.1	185.0	181.1	178.4	177.8
35°	1382.9	1173.0	694.2	360.6	230.8	194.4	183.4	178.4	176.2	175.1	174.5
37.5°	1498.9	1234.3	655.0	319.2	212.1	185.0	175.6	172.9	171.8	171.8	171.8
40°	1644.7	1315.0	619.6	289.9	201.6	177.8	170.1	167.9	167.9	168.4	168.4
42.5°	1821.9	1416.0	589.3	270.1	195.5	172.9	166.2	165.1	164.6	164.6	165.1
45°	2027.9	1535.3	570.5	254.6	191.1	170.1	163.5	162.9	160.7	159.6	159.6
47.5°	2235.0	1662.9	569.4	245.8	185.6	166.8	160.7	160.7	156.3	154.1	154.6
50°	2428.3	1777.2	581.5	243.6	182.2	161.8	157.9	158.5	152.4	149.7	149.1
52.5°	2584.1	1864.5	596.4	246.3	182.2	157.4	153.0	155.7	149.1	145.8	145.2
55°	2704.5	1925.2	602.0	252.4	184.5	153.5	148.6	153.0	148.0	143.6	143.6
57.5°	2790.6	1944.5	578.2	255.1	187.8	153.0	144.1	152.4	149.7	144.1	144.1
60°	2759.1	1832.4	489.9	244.7	187.2	151.9	140.8	153.5	155.2	149.1	149.1
62.5°	2513.4	1533.1	393.2	220.9	177.8	148.0	137.0	152.4	159.1	156.8	155.7
65°	2046.2	1124.4	304.9	192.7	161.8	139.7	128.7	142.5	150.2	152.4	153.0
67.5°	1442.0	711.9	236.9	164.0	141.9	127.6	119.3	125.9	128.7	129.8	132.0
70°	788.6	385.5	188.3	138.1	121.5	115.4	109.3	109.9	108.8	107.7	108.8
72°	396.0	251.8	159.1	119.8	107.7	103.8	101.1	99.4	99.4	97.8	98.3
72.5°	340.7	234.2	153.5	115.4	104.4	101.1	98.9	97.2	96.6	95.5	96.1
75°	227.0	185.6	128.1	96.6	88.9	86.7	87.8	86.2	86.7	85.6	86.2
77.5°	183.4	159.6	108.8	81.7	76.2	72.9	75.1	75.7	76.8	75.7	75.1
80°	153.5	135.9	91.1	67.4	63.5	60.7	61.9	65.7	66.3	63.0	62.4
82.5°	99.4	109.3	71.8	52.5	48.6	47.5	50.3	54.1	55.2	50.8	49.7
85°	83.4	87.8	51.9	35.9	32.0	30.9	36.4	40.3	43.1	38.7	37.6
87.5°	23.2	43.1	25.4	17.1	14.4	14.4	17.7	21.0	24.9	25.4	25.4
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)