

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: P198773

Luminaire Tested: **XNV2-AF-02-LED-U-T3-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198773  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (p24135)  
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-T3-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9969.7 lumens  
Efficiency: N/A  
Efficacy: 117.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

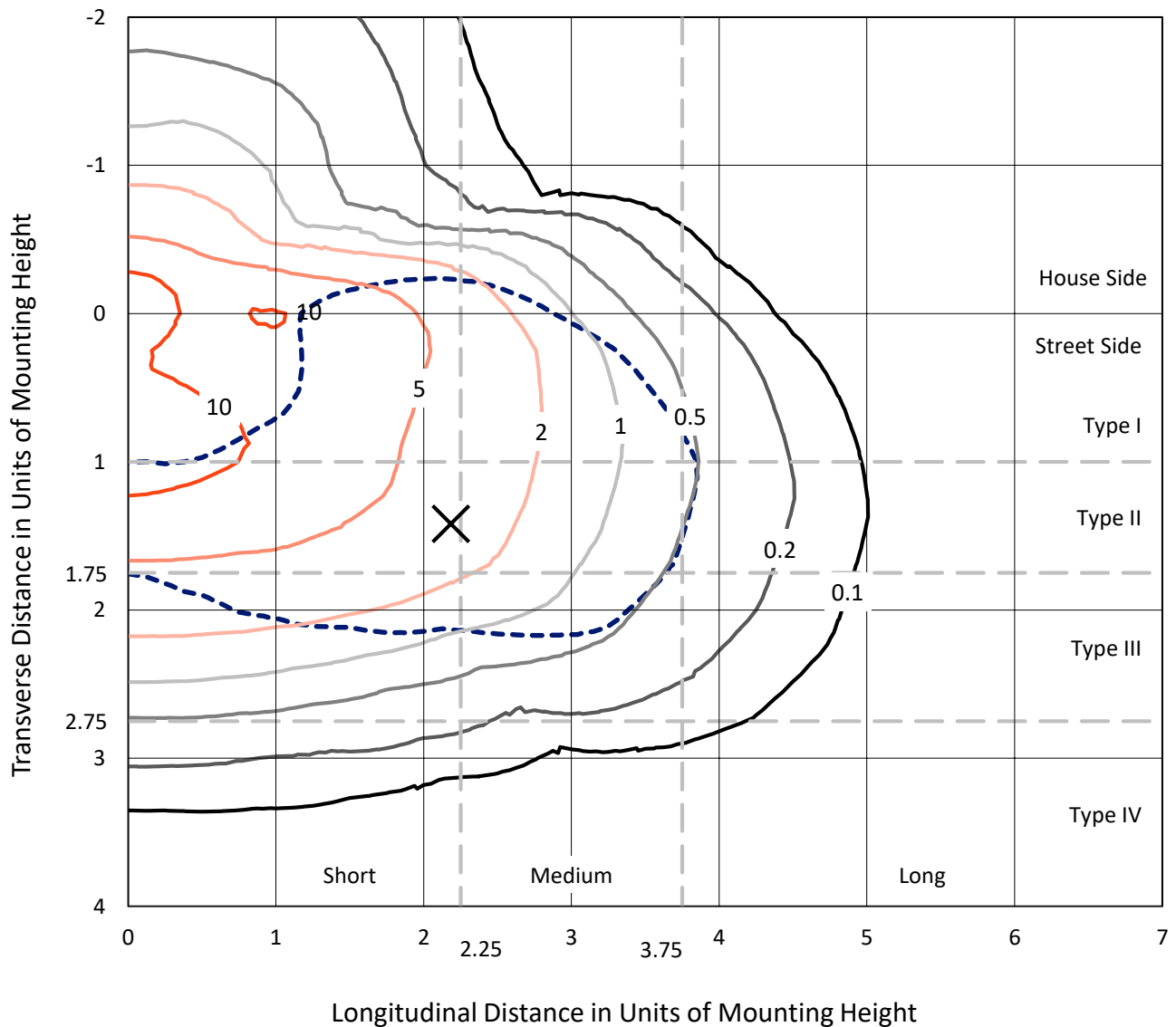
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

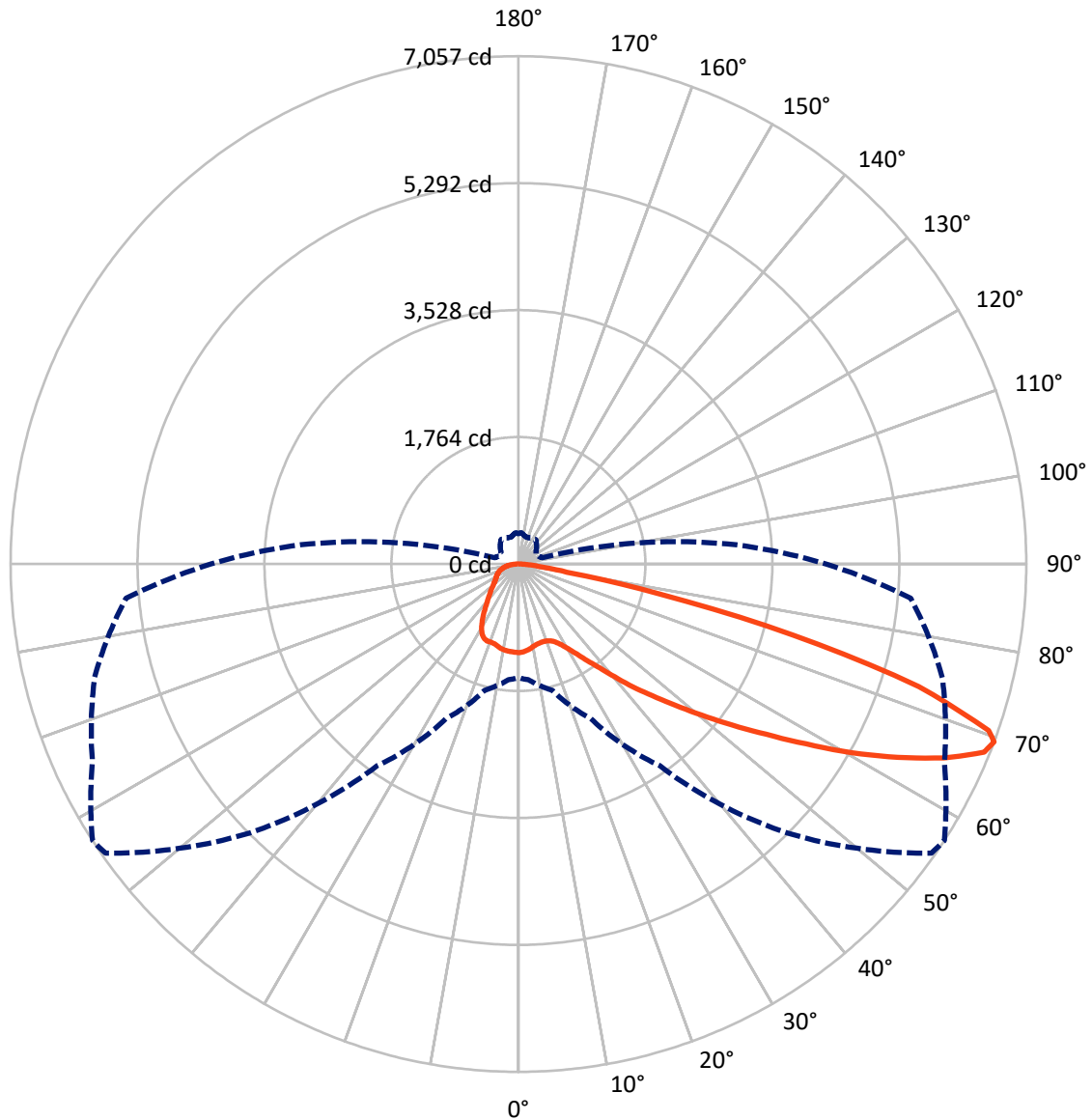
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2200.0	0.0	2200.0
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	7769.7	0.0	7769.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	9969.7	0.0	9969.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.3	1.2
10°-20°	327.9	3.3
20°-30°	545.5	5.5
30°-40°	890.7	8.9
40°-50°	1503.3	15.1
50°-60°	2338.5	23.5
60°-70°	2785.7	27.9
70°-80°	1297.7	13.0
80°-90°	165.1	1.7
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°	9969.7	100.0
0°-180°	9969.7	100.0

**Coefficient of Utilization**



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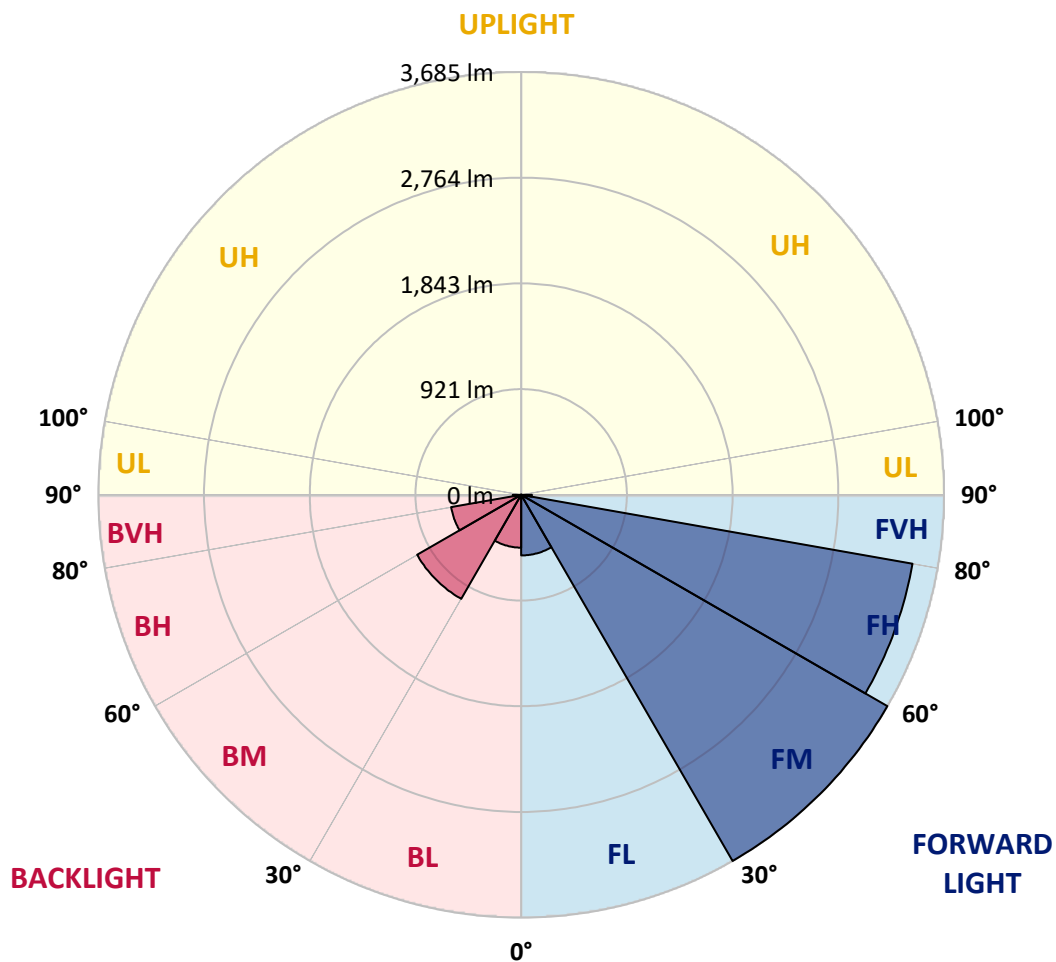
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	528.0	5.3			
FM	(30°-60°)	3685.5	37.0			
FH	(60°-80°)	3463.5	34.7			G2/5000
FVH	(80°-90°)	92.8	0.9			G1/100
BL	(0°-30°)	460.7	4.6	B1/500		
BM	(30°-60°)	1047.1	10.5	B2/2500		
BH	(60°-80°)	619.9	6.2	B2/1000		G2/1000
BVH	(80°-90°)	72.3	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8
2.5°	1224.8	1224.8	1228.1	1228.1	1228.1	1226.7	1222.9	1224.2	1221.6	1219.8	1216.5
5°	1199.9	1201.3	1205.0	1206.4	1208.2	1208.9	1208.9	1208.2	1208.9	1208.9	1207.0
7.5°	1165.4	1166.8	1171.2	1173.7	1179.5	1184.6	1187.1	1187.1	1190.4	1193.0	1193.6
10°	1144.4	1144.4	1146.9	1146.9	1151.4	1154.0	1162.3	1161.7	1170.6	1178.8	1182.7
12.5°	1141.8	1141.8	1140.6	1136.1	1133.5	1132.9	1141.2	1142.5	1155.9	1170.6	1177.6
15°	1150.1	1150.1	1146.3	1137.4	1127.8	1123.3	1131.7	1134.1	1148.9	1166.1	1177.0
17.5°	1177.0	1176.3	1168.0	1150.1	1133.5	1126.6	1129.1	1131.7	1145.1	1164.8	1178.2
20°	1236.3	1236.3	1218.4	1185.9	1157.2	1140.6	1136.7	1138.6	1148.3	1166.8	1184.0
22.5°	1340.4	1342.3	1310.4	1256.7	1207.6	1172.5	1157.2	1159.1	1163.6	1181.4	1200.5
25°	1493.5	1488.4	1443.1	1367.2	1290.6	1230.6	1199.3	1201.3	1201.3	1217.8	1237.6
27.5°	1655.6	1657.0	1591.8	1510.2	1409.3	1319.9	1270.2	1269.5	1268.9	1284.8	1305.9
30°	1838.9	1839.5	1764.2	1669.7	1554.2	1439.9	1365.2	1364.6	1358.9	1378.6	1406.1
32.5°	2039.3	2038.6	1951.2	1844.6	1716.3	1586.7	1489.7	1489.1	1484.6	1511.4	1544.6
35°	2261.3	2261.3	2174.6	2043.0	1904.6	1760.3	1648.0	1647.4	1649.9	1686.3	1717.5
37.5°	2528.8	2534.6	2429.9	2270.3	2119.0	1965.2	1834.4	1830.6	1811.4	1872.7	1924.4
40°	2807.7	2823.7	2715.2	2528.8	2365.4	2206.5	2062.3	2059.7	2043.0	2108.2	2191.8
42.5°	3109.7	3146.0	3025.4	2835.2	2657.1	2485.4	2340.5	2333.5	2269.6	2371.2	2502.0
45°	3505.3	3529.0	3354.1	3181.8	3013.9	2817.9	2645.7	2607.9	2544.1	2674.3	2844.1
47.5°	3774.7	3763.2	3654.1	3538.5	3430.7	3243.1	2978.1	2930.2	2852.4	3024.8	3211.8
50°	3941.9	3950.2	3889.0	3883.2	3877.5	3746.7	3353.4	3296.0	3206.0	3410.2	3628.5
52.5°	4052.3	4014.7	4025.5	4155.7	4313.4	4250.9	3777.9	3714.0	3621.6	3825.7	4072.2
55°	4006.4	3956.6	4056.8	4313.4	4684.2	4698.3	4243.8	4178.0	4099.0	4267.4	4605.7
57.5°	3816.2	3841.1	3999.3	4356.1	4937.6	5099.1	4779.3	4712.3	4556.5	4727.7	5112.5
60°	3548.7	3599.2	3841.1	4288.5	5115.1	5411.2	5367.2	5322.5	5054.4	5175.7	5644.8
62.5°	3261.6	3311.3	3608.8	4173.0	5035.3	5687.6	5944.2	5916.7	5603.9	5607.2	5982.4
65°	2837.1	2857.5	3161.3	3857.6	4813.8	5937.1	6521.8	6497.6	6129.2	5975.5	6076.9
67.5°	2142.7	2168.1	2417.7	3045.1	4139.8	5801.9	6983.3	6979.4	6445.2	6112.0	5852.2
69°	1582.3	1613.5	1817.2	2364.1	3423.0	5286.1	7005.0	7056.6	6530.7	6098.0	5472.5
70°	1157.8	1193.6	1381.8	1876.5	2851.2	4716.8	6819.2	6930.3	6498.2	6009.2	5176.3
72.5°	492.1	504.2	596.8	847.0	1446.4	2844.1	5585.4	5819.1	5868.9	5384.4	4044.0
75°	308.3	312.1	348.5	434.7	643.3	1176.3	3617.1	3935.5	4381.7	4177.4	2707.5
77.5°	232.3	235.5	256.6	299.3	399.6	439.2	1678.0	2001.0	2509.7	2457.3	1347.3
80°	178.1	180.0	194.1	217.7	281.5	275.1	544.4	684.3	1047.4	924.2	476.8
82.5°	139.7	140.5	152.5	157.0	196.6	185.1	273.1	304.4	423.2	351.7	232.9
85°	123.8	125.7	137.9	114.9	125.7	111.7	150.0	162.8	224.6	211.9	88.1
87.5°	63.2	66.4	115.5	98.3	63.2	53.0	65.8	70.9	91.2	98.9	42.8
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°	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8	1231.8
2.5°	1217.2	1217.8	1219.8	1222.9	1228.1	1234.4	1242.1	1249.7	1254.2	1257.4	1256.1
5°	1207.0	1207.6	1211.4	1217.2	1223.6	1233.2	1245.9	1255.5	1262.5	1266.9	1266.3
7.5°	1194.2	1196.1	1203.8	1210.2	1219.1	1226.7	1237.0	1245.9	1252.9	1257.4	1256.7
10°	1184.6	1186.5	1196.1	1204.4	1212.1	1213.3	1211.4	1208.9	1208.2	1211.4	1210.2
12.5°	1180.2	1184.0	1193.0	1198.7	1195.4	1183.3	1169.3	1163.6	1161.7	1168.0	1168.6
15°	1181.4	1184.6	1192.2	1188.5	1171.2	1150.8	1143.1	1147.6	1151.4	1155.2	1155.9
17.5°	1184.6	1186.5	1188.5	1174.4	1150.1	1136.7	1134.1	1129.7	1118.3	1111.8	1111.2
20°	1190.4	1193.0	1189.7	1167.4	1145.7	1127.8	1097.2	1069.7	1043.5	1029.5	1023.8
22.5°	1210.2	1212.1	1202.5	1180.8	1147.6	1089.5	1027.7	980.4	940.2	918.5	910.1
25°	1249.1	1252.3	1238.9	1211.4	1124.6	1023.2	935.7	871.9	821.4	795.2	788.3
27.5°	1317.4	1320.5	1305.9	1234.4	1071.0	934.5	828.5	765.3	721.9	699.5	696.3
30°	1419.5	1423.9	1410.5	1233.8	989.3	821.4	723.8	686.8	661.8	646.6	645.9
32.5°	1561.2	1577.8	1522.9	1212.1	888.4	707.2	644.7	631.9	619.8	609.6	609.6
35°	1741.2	1780.1	1634.0	1166.8	777.4	629.3	600.6	588.5	573.2	562.3	561.0
37.5°	1956.3	2017.0	1713.1	1086.4	681.7	591.7	573.8	554.0	529.8	508.7	503.6
40°	2251.8	2265.8	1752.0	955.4	610.2	571.2	548.9	524.1	493.4	469.7	467.2
42.5°	2548.6	2502.6	1744.3	815.1	569.4	552.7	523.3	495.9	468.5	448.7	448.7
45°	2886.3	2709.4	1686.3	674.0	532.3	531.6	499.7	473.6	452.6	437.8	434.7
47.5°	3209.2	2895.2	1586.1	570.0	494.0	510.7	484.5	463.4	444.3	430.2	427.6
50°	3601.1	3110.3	1479.5	497.3	457.0	492.1	478.0	467.2	448.7	424.4	421.9
52.5°	3990.4	3361.7	1397.1	442.3	424.4	477.4	481.9	483.1	466.0	418.7	415.5
55°	4408.5	3630.5	1310.4	399.6	397.6	470.4	490.8	489.6	481.3	420.0	414.9
57.5°	4806.1	3900.4	1180.8	369.6	376.5	463.4	492.8	472.3	457.7	426.4	418.1
60°	5135.5	4123.8	990.6	348.5	358.7	449.4	480.0	449.4	424.4	425.0	417.5
62.5°	5295.7	4186.4	757.6	324.3	344.0	426.4	461.5	432.1	409.1	427.6	423.2
65°	5173.8	4008.3	540.0	301.9	326.1	399.6	450.6	417.5	401.5	440.4	435.3
67.5°	4736.0	3523.2	391.9	282.1	308.9	372.1	430.2	404.1	393.8	450.0	438.5
69°	4270.6	3041.9	339.5	270.7	296.8	357.4	416.8	397.0	388.1	436.6	420.0
70°	3883.8	2671.1	313.4	263.6	286.6	349.1	406.6	392.5	382.3	420.6	400.8
72.5°	2784.8	1726.5	263.6	242.5	259.7	330.6	384.2	375.9	360.6	379.7	367.0
75°	1682.4	901.2	224.0	220.9	231.7	305.0	358.0	347.8	332.6	334.4	328.1
77.5°	772.9	416.1	187.6	195.3	202.3	273.1	326.1	314.7	300.6	295.5	296.1
80°	338.9	243.2	157.0	166.5	170.4	245.7	291.6	279.0	263.6	291.0	270.0
82.5°	183.2	141.1	122.5	128.9	139.7	213.8	253.4	236.8	222.1	258.5	208.7
85°	74.1	72.1	83.0	89.4	97.0	153.9	211.9	194.7	176.8	158.3	154.5
87.5°	31.9	34.5	40.8	43.4	51.7	95.7	142.3	124.5	125.1	107.2	105.4
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)