

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: P198807

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198807  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)  
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-5MQ-7050  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12842 lumens  
Efficiency: N/A  
Efficacy: 115.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 111  
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

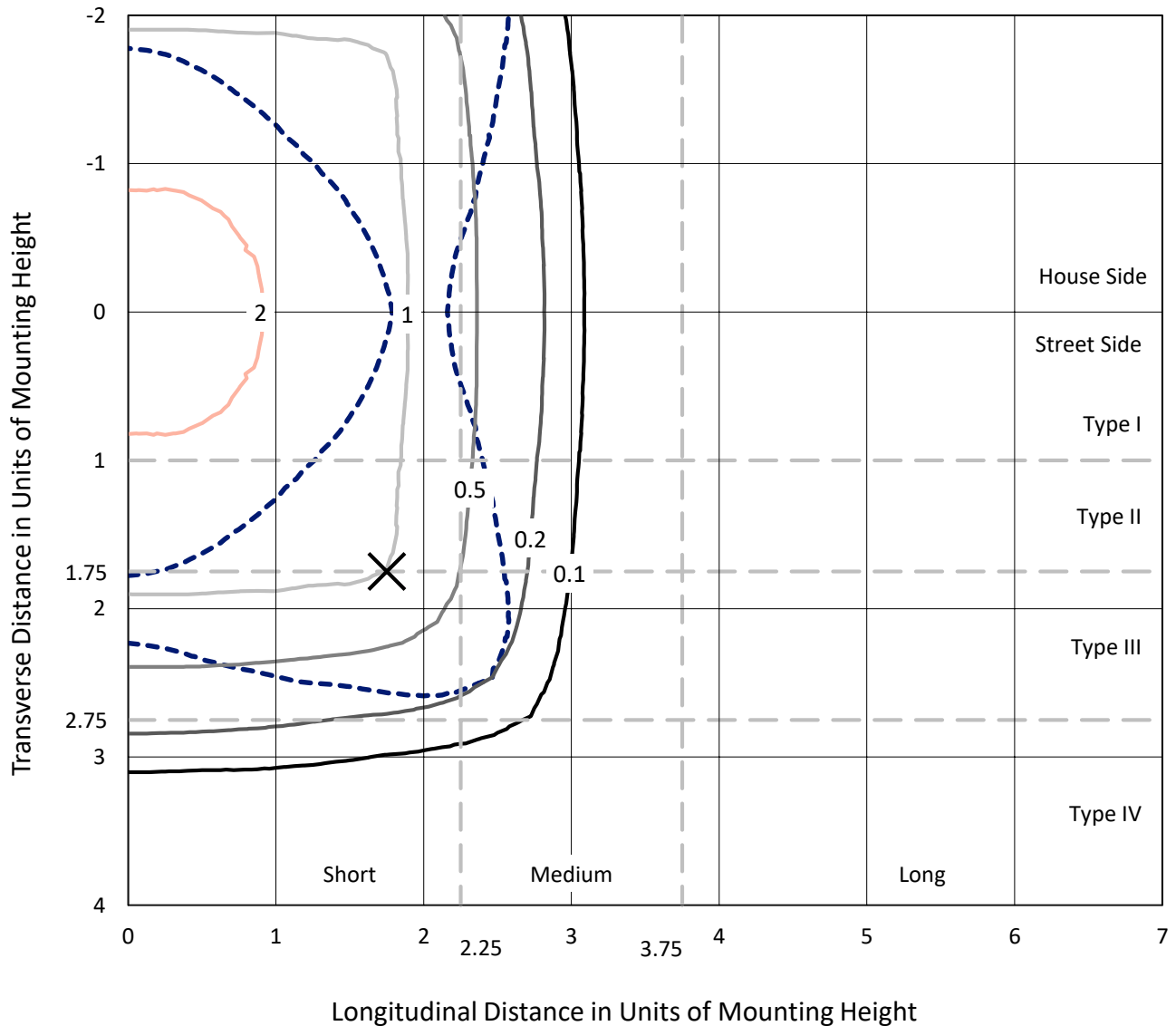


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

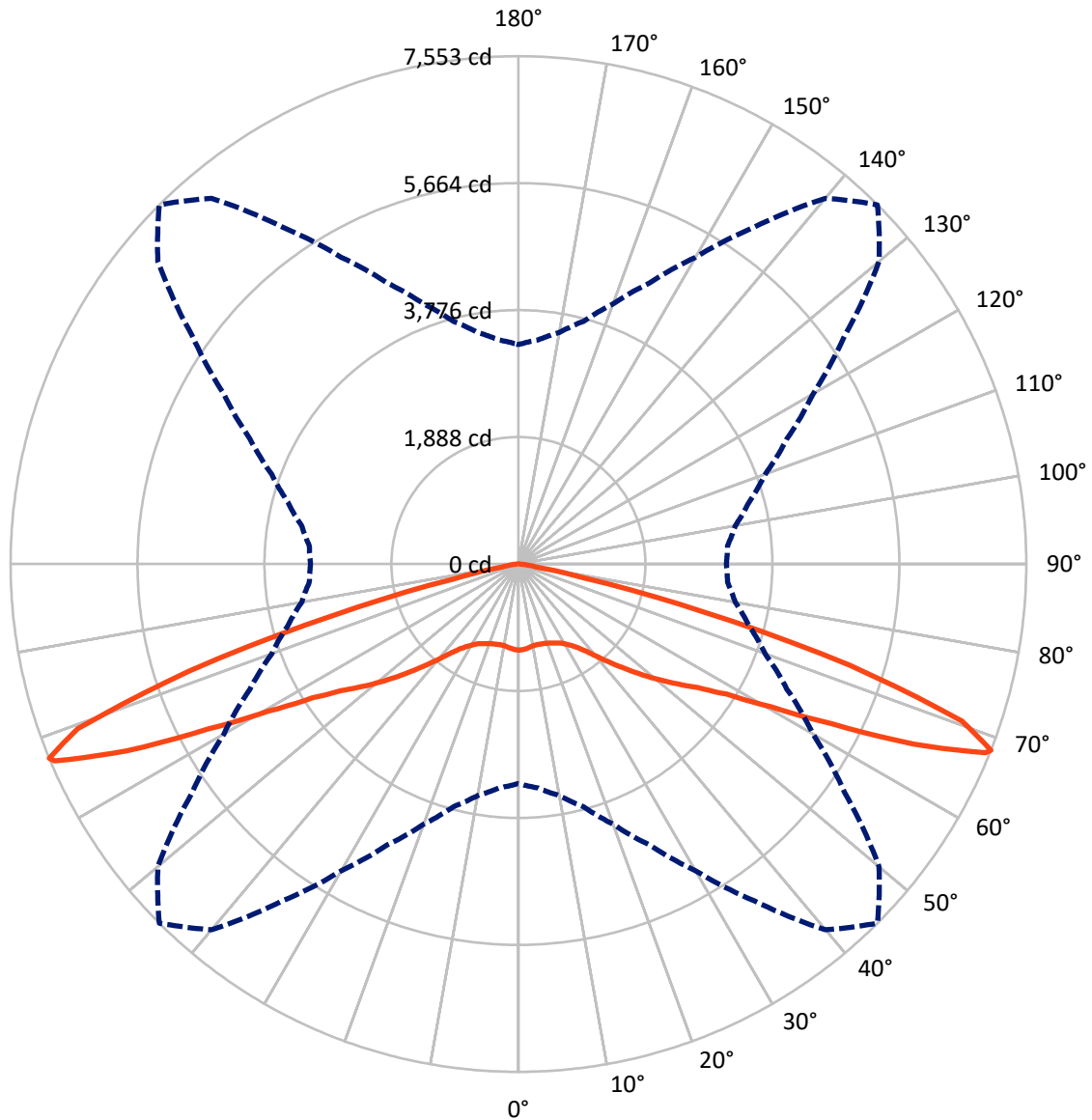


Based on 20 foot mounting height. Maximum calculated value = 3.2 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6421.0	0.0	6421.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6421.0	0.0	6421.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12842.0	0.0	12842.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.9	0.9
10°-20°	347.7	2.7
20°-30°	591.0	4.6
30°-40°	967.2	7.5
40°-50°	1728.5	13.5
50°-60°	2919.2	22.7
60°-70°	4526.6	35.2
70°-80°	1556.4	12.1
80°-90°	85.5	0.7
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°	12842.0	100.0
0°-180°	12842.0	100.0



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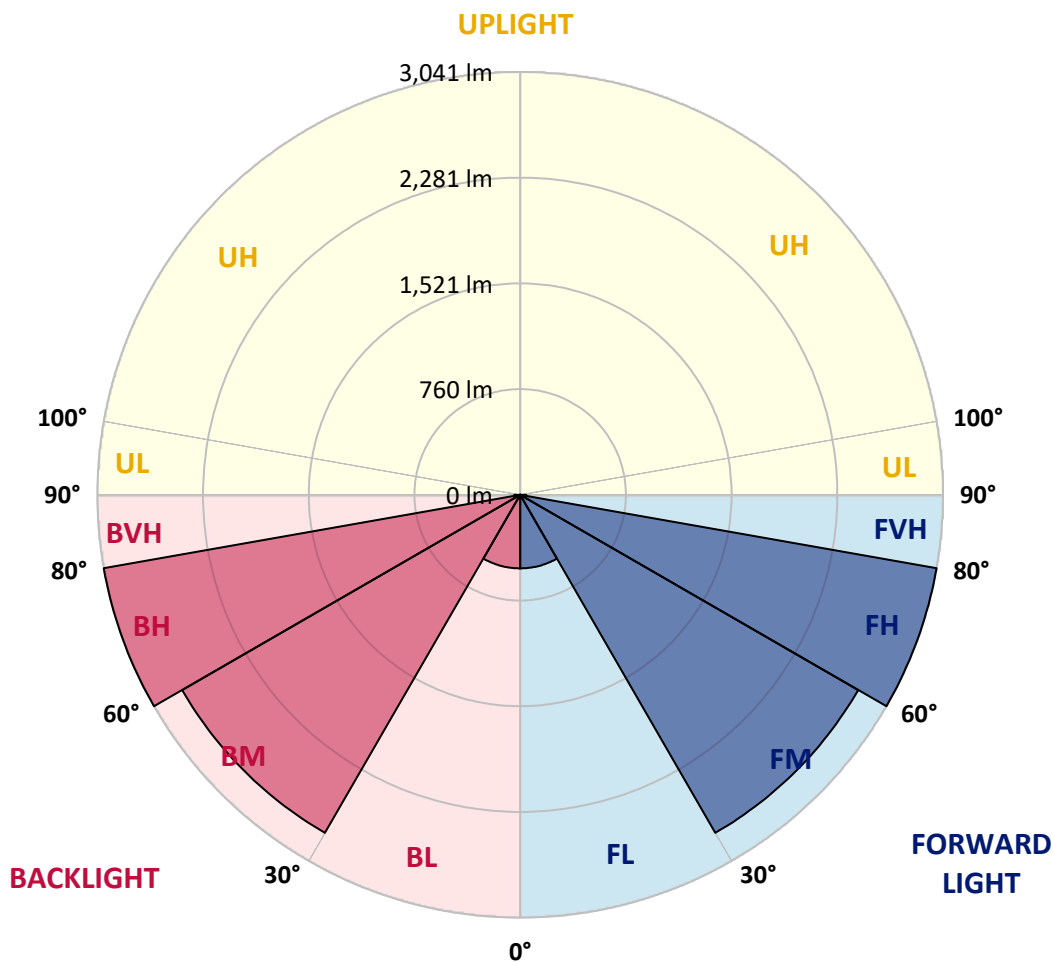
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	529.3	4.1			
FM	(30°-60°)	2807.5	21.9			
FH	(60°-80°)	3041.5	23.7			G2/5000
FVH	(80°-90°)	42.8	0.3			G1/100
BL	(0°-30°)	529.3	4.1	B2/1000		
BM	(30°-60°)	2807.5	21.9	B3/5000		
BH	(60°-80°)	3041.5	23.7	B4/5000		G2/5000
BVH	(80°-90°)	42.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0
2.5°	1286.5	1286.5	1288.1	1287.3	1285.0	1282.6	1280.2	1277.9	1276.3	1274.7	1273.2
5°	1273.2	1273.2	1275.5	1274.0	1272.4	1270.0	1268.4	1266.1	1264.5	1262.9	1263.7
7.5°	1255.9	1257.4	1259.0	1258.2	1255.1	1254.3	1251.9	1251.1	1249.6	1247.2	1248.0
10°	1240.9	1241.7	1243.3	1242.5	1241.7	1239.3	1238.6	1237.8	1237.0	1233.8	1233.1
12.5°	1226.0	1227.6	1229.1	1229.9	1229.1	1229.9	1230.7	1231.5	1230.7	1229.1	1229.1
15°	1214.2	1215.8	1218.1	1220.5	1221.3	1226.0	1229.1	1232.3	1234.6	1235.4	1233.1
17.5°	1207.9	1210.3	1213.4	1218.1	1222.0	1227.6	1233.1	1237.8	1241.7	1242.5	1240.1
20°	1207.1	1209.5	1214.2	1219.7	1226.8	1233.8	1242.5	1249.6	1253.5	1255.9	1253.5
22.5°	1212.6	1215.8	1222.0	1229.1	1237.8	1247.2	1258.2	1266.1	1274.0	1277.1	1274.7
25°	1228.3	1231.5	1238.6	1247.2	1256.6	1268.4	1279.5	1289.7	1297.5	1301.5	1298.3
27.5°	1261.4	1262.2	1270.0	1279.5	1290.5	1300.7	1314.8	1319.6	1325.9	1329.8	1325.9
30°	1307.8	1309.3	1316.4	1331.4	1341.6	1354.9	1362.8	1367.5	1374.6	1378.5	1373.8
32.5°	1378.5	1380.1	1386.4	1400.6	1410.0	1420.2	1429.7	1432.8	1439.9	1444.6	1439.1
35°	1478.4	1481.6	1487.1	1496.5	1504.4	1512.2	1519.3	1516.9	1521.7	1528.0	1522.4
37.5°	1615.2	1614.5	1616.0	1623.1	1631.0	1635.7	1646.7	1641.2	1645.9	1651.4	1648.3
40°	1774.9	1774.9	1774.1	1786.7	1789.8	1794.5	1806.3	1799.3	1805.5	1811.8	1806.3
42.5°	1956.5	1959.7	1963.6	1973.8	1982.5	1984.1	1989.6	1986.4	1994.3	1999.8	1994.3
45°	2165.7	2170.4	2175.2	2198.7	2202.7	2205.8	2209.8	2199.5	2208.2	2212.9	2211.3
47.5°	2382.8	2391.4	2401.6	2426.0	2441.7	2448.8	2452.0	2440.2	2441.0	2448.0	2448.8
50°	2628.1	2637.5	2647.8	2675.3	2690.2	2702.8	2706.8	2693.4	2695.0	2700.5	2702.0
52.5°	2854.6	2865.6	2887.6	2924.6	2945.8	2967.8	2969.4	2952.9	2960.0	2963.9	2960.8
55°	3067.7	3081.9	3111.0	3160.5	3199.0	3242.3	3261.9	3243.9	3243.9	3240.7	3239.1
57.5°	3316.2	3331.9	3361.8	3419.2	3472.7	3534.8	3588.3	3606.4	3639.4	3650.4	3633.1
60°	3690.5	3707.0	3737.7	3813.2	3880.8	3971.3	4059.3	4130.9	4247.3	4310.2	4253.6
62.5°	4032.6	4057.8	4130.1	4262.2	4408.5	4576.0	4770.2	4908.6	5120.2	5225.6	5083.2
65°	3954.8	4005.9	4147.4	4355.0	4657.0	5020.3	5415.9	5795.7	6232.9	6457.0	6167.6
67.5°	3454.6	3497.9	3650.4	3891.8	4268.5	4769.4	5384.4	6170.8	7072.8	7492.7	6980.8
68°	3263.5	3344.5	3496.3	3736.1	4116.0	4608.2	5264.9	6114.2	7098.7	7552.5	6999.6
70°	2502.3	2531.4	2676.9	2892.3	3302.0	3784.9	4447.8	5415.9	6528.6	6995.7	6427.2
72.5°	1189.0	1206.3	1300.7	1513.0	1773.3	2166.5	2751.6	3664.6	4667.2	5153.2	4586.2
75°	435.7	439.6	461.6	511.9	609.5	757.3	1038.0	1605.8	2377.3	2834.9	2386.7
77.5°	235.1	235.9	244.6	257.1	274.4	294.1	336.6	451.4	728.2	990.9	769.1
80°	147.8	147.1	155.7	165.9	177.7	187.2	191.1	204.5	230.4	269.7	247.7
82.5°	75.5	82.6	102.2	113.2	130.5	133.7	129.8	129.0	136.8	147.8	152.6
85°	41.7	37.0	54.3	72.3	78.6	81.0	81.8	77.1	75.5	73.9	77.9
87.5°	21.2	19.7	23.6	36.2	38.5	31.5	32.2	27.5	18.9	18.9	19.7
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0	1281.0
2.5°	1271.6	1272.4	1270.8	1270.8	1270.8	1271.6	1270.8	1270.0
5°	1261.4	1262.9	1262.9	1263.7	1264.5	1264.5	1264.5	1264.5
7.5°	1246.4	1247.2	1248.8	1248.8	1248.8	1248.8	1248.8	1248.8
10°	1232.3	1230.7	1229.9	1228.3	1228.3	1226.0	1226.8	1227.6
12.5°	1225.2	1222.0	1220.5	1218.1	1216.5	1214.2	1214.2	1215.0
15°	1228.3	1223.6	1218.9	1217.3	1215.8	1214.2	1212.6	1213.4
17.5°	1234.6	1229.1	1223.6	1220.5	1217.3	1215.0	1214.2	1215.0
20°	1248.0	1240.1	1231.5	1226.0	1219.7	1218.1	1215.8	1218.1
22.5°	1266.1	1256.6	1245.6	1235.4	1228.3	1225.2	1222.0	1224.4
25°	1288.1	1277.9	1266.9	1255.1	1247.2	1244.9	1240.9	1240.9
27.5°	1318.8	1310.1	1300.7	1289.7	1281.8	1279.5	1273.2	1273.2
30°	1367.5	1358.9	1350.2	1340.8	1332.9	1330.6	1322.7	1322.7
32.5°	1432.0	1422.6	1417.1	1409.2	1402.9	1399.0	1389.5	1388.8
35°	1518.5	1509.9	1509.1	1503.6	1497.3	1498.1	1488.6	1487.1
37.5°	1642.8	1635.7	1638.0	1633.3	1627.8	1632.5	1627.0	1627.0
40°	1801.6	1799.3	1801.6	1798.5	1799.3	1800.0	1795.3	1796.9
42.5°	1993.5	1987.2	2001.4	1999.8	1997.4	2003.7	1992.7	1984.8
45°	2214.5	2212.1	2226.3	2228.6	2223.9	2227.8	2208.2	2207.4
47.5°	2454.3	2454.3	2466.9	2465.3	2460.6	2461.4	2437.8	2422.9
50°	2704.4	2702.8	2715.4	2712.3	2706.0	2705.2	2680.8	2665.9
52.5°	2964.7	2964.7	2982.8	2974.1	2959.2	2952.1	2922.2	2902.6
55°	3252.5	3248.6	3254.1	3225.8	3196.7	3175.4	3138.5	3123.5
57.5°	3616.6	3571.0	3531.7	3495.5	3454.6	3429.4	3386.2	3370.5
60°	4133.3	4011.4	3958.7	3886.3	3818.7	3784.9	3727.5	3696.8
62.5°	4848.9	4646.8	4503.6	4344.0	4189.9	4081.4	3994.1	3955.5
65°	5676.2	5235.8	4871.7	4529.6	4239.4	4009.0	3880.8	3840.7
67.5°	5990.7	5182.3	4554.0	4063.3	3711.0	3436.5	3283.2	3250.9
68°	5923.9	5059.6	4406.9	3904.4	3550.5	3273.7	3121.2	3092.1
70°	5225.6	4268.5	3579.6	3079.5	2749.2	2485.8	2378.0	2331.6
72.5°	3562.3	2741.4	2102.8	1682.1	1435.2	1268.4	1169.4	1135.5
75°	1639.6	1108.0	740.0	552.8	469.5	429.4	398.7	390.8
77.5°	478.1	347.6	298.8	276.8	260.3	246.1	235.9	235.1
80°	227.3	213.1	206.8	192.7	177.7	164.4	154.9	156.5
82.5°	152.6	148.6	148.6	134.5	110.9	95.2	78.6	70.8
85°	81.0	84.1	88.9	84.1	73.1	54.3	35.4	38.5
87.5°	27.5	31.5	33.0	32.2	29.1	22.0	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)