

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: P198973

Luminaire Tested: **XNV2-AF-02-LED-U-5NQ-7060-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198973  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)  
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-5NQ-7060-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10016 lumens  
Efficiency: N/A  
Efficacy: 117.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

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

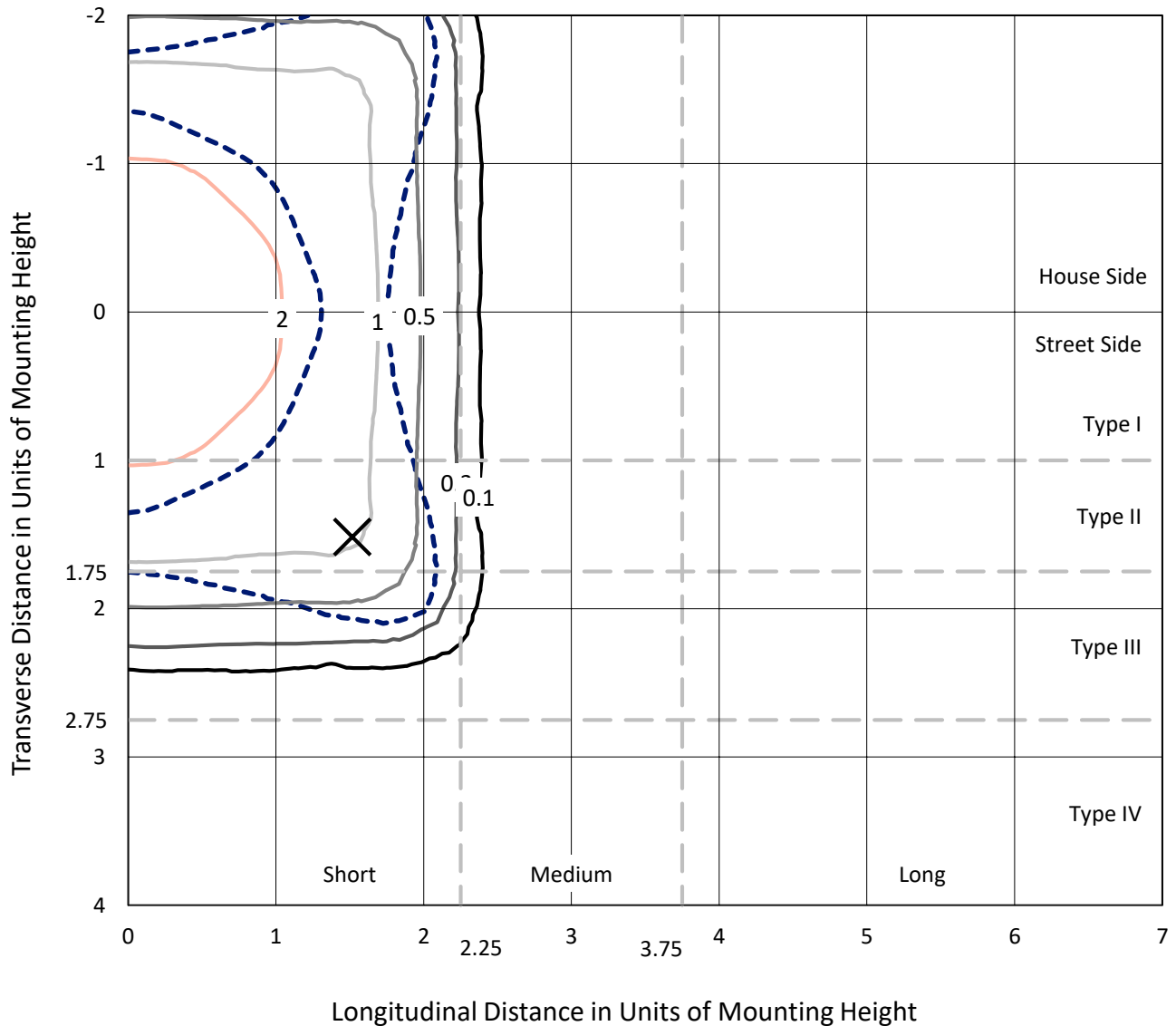


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### Iso-Footcandle Lines of Horizontal Illumination

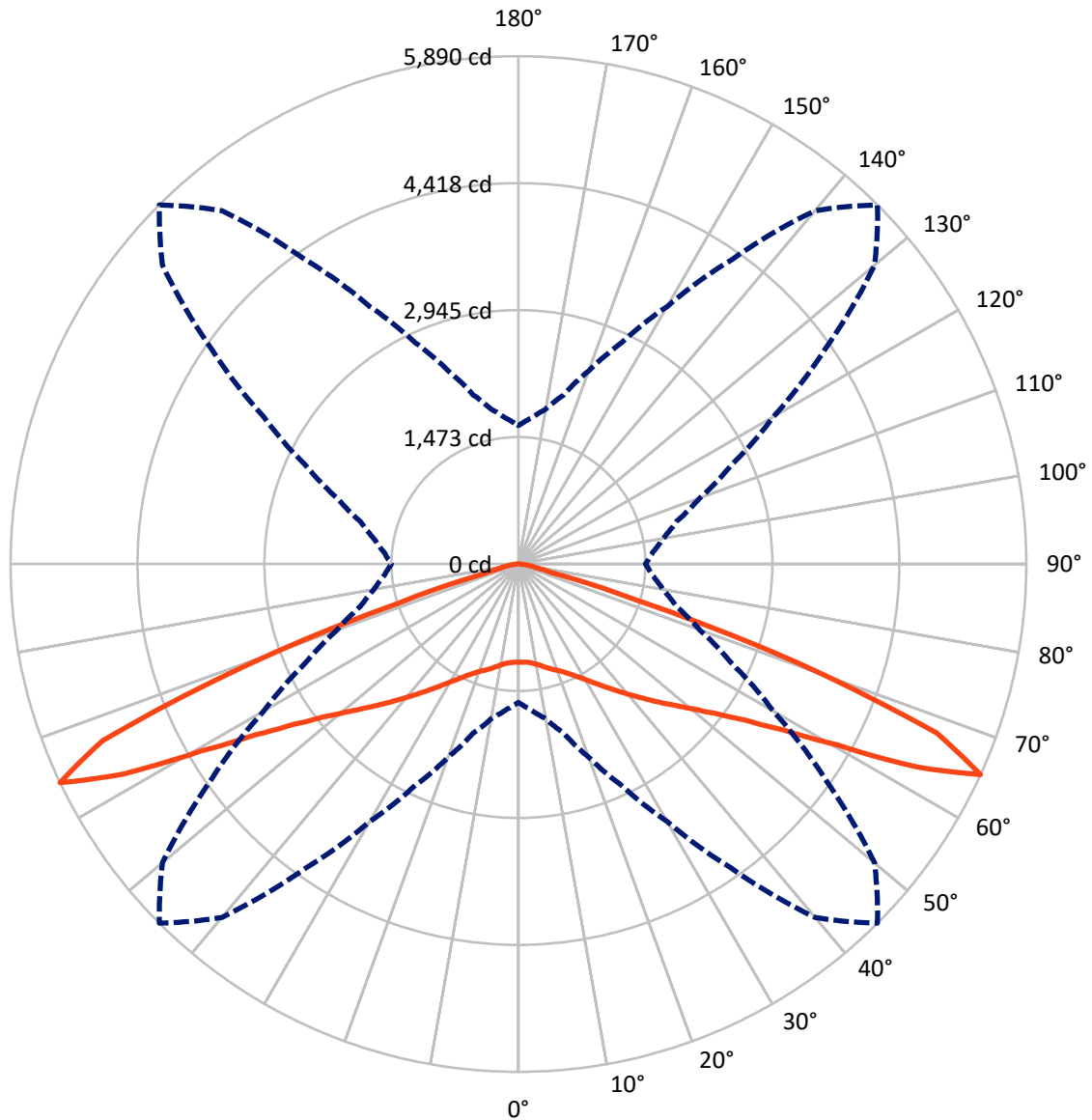
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.9 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5008.0	0.0	5008.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5008.0	0.0	5008.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10016.0	0.0	10016.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.9	1.1
10°-20°	355.6	3.6
20°-30°	663.3	6.6
30°-40°	1118.5	11.2
40°-50°	1816.8	18.1
50°-60°	2846.6	28.4
60°-70°	2687.0	26.8
70°-80°	362.1	3.6
80°-90°	55.2	0.6
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°	10016.0	100.0
0°-180°	10016.0	100.0



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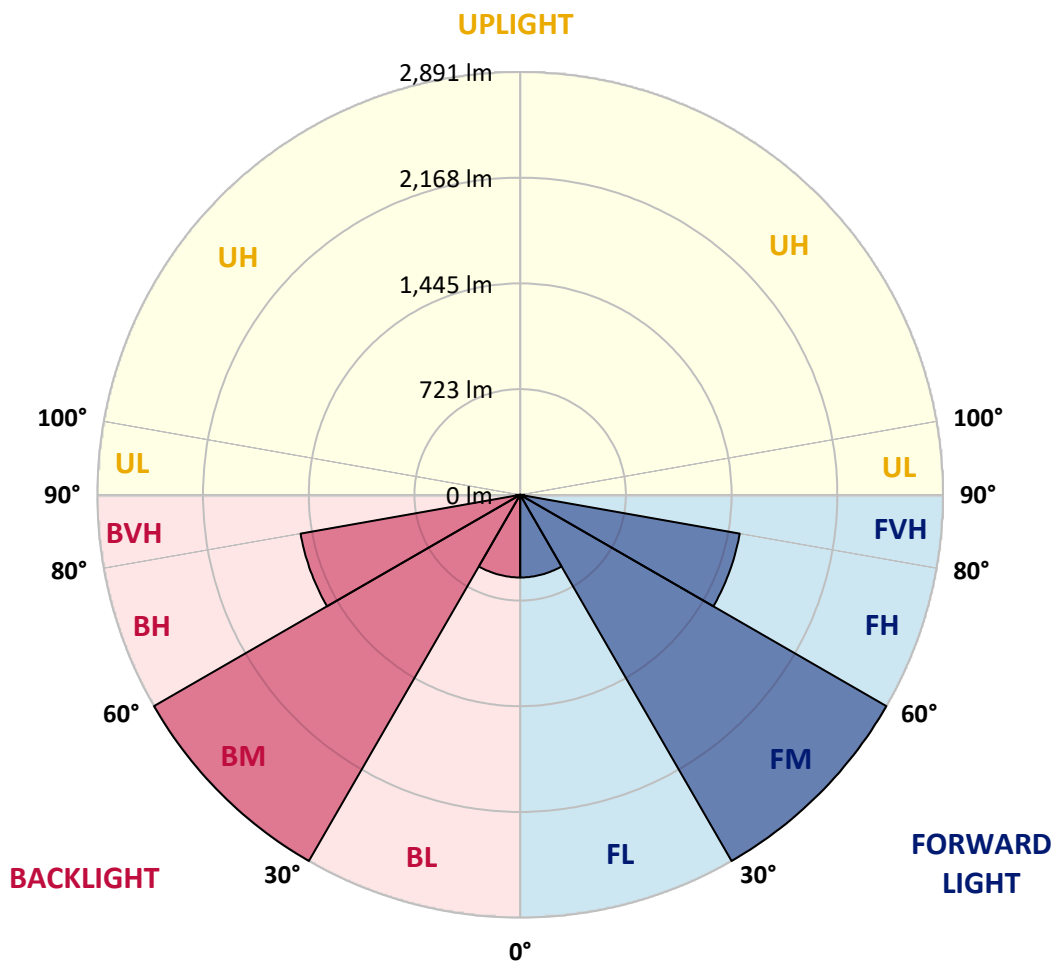
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	564.9	5.6			
FM	(30°-60°)	2890.9	28.9			
FH	(60°-80°)	1524.6	15.2			G1/1800
FVH	(80°-90°)	27.6	0.3			G1/100
BL	(0°-30°)	564.9	5.6	B2/1000		
BM	(30°-60°)	2890.9	28.9	B3/5000		
BH	(60°-80°)	1524.6	15.2	B3/2500		G1/1800
BVH	(80°-90°)	27.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3
2.5°	1148.7	1148.7	1150.5	1149.9	1147.4	1145.5	1143.7	1141.2	1139.9	1138.7	1138.1
5°	1154.9	1154.9	1156.8	1156.2	1154.3	1151.8	1150.5	1148.7	1146.8	1145.5	1146.2
7.5°	1170.5	1171.1	1171.8	1171.1	1169.3	1167.4	1164.9	1164.3	1161.8	1159.9	1161.1
10°	1194.2	1194.2	1194.8	1195.5	1194.2	1189.8	1189.8	1188.6	1186.1	1183.6	1184.2
12.5°	1220.4	1220.4	1221.0	1221.0	1221.0	1218.5	1219.2	1218.5	1215.4	1214.2	1215.4
15°	1246.0	1246.6	1246.6	1247.9	1247.9	1248.5	1251.0	1251.0	1249.7	1249.1	1249.1
17.5°	1276.0	1277.2	1277.8	1279.7	1280.3	1281.6	1284.1	1284.7	1285.3	1283.4	1284.1
20°	1315.9	1316.5	1318.4	1319.0	1321.5	1321.5	1322.7	1322.1	1320.9	1318.4	1318.4
22.5°	1360.8	1362.1	1365.8	1365.8	1368.9	1367.0	1367.7	1365.8	1362.7	1361.4	1360.2
25°	1419.5	1421.3	1424.4	1423.2	1424.4	1421.3	1421.3	1421.3	1419.5	1417.6	1417.0
27.5°	1493.7	1490.6	1493.7	1491.2	1490.6	1488.1	1488.7	1487.5	1485.6	1485.0	1482.5
30°	1571.1	1567.3	1569.2	1569.8	1568.6	1568.0	1565.5	1563.6	1560.5	1561.1	1559.2
32.5°	1659.7	1655.9	1657.8	1658.4	1657.2	1658.4	1657.8	1653.4	1649.7	1652.2	1652.2
35°	1765.1	1762.6	1767.6	1769.5	1765.7	1763.9	1761.4	1756.4	1750.8	1754.5	1755.1
37.5°	1891.8	1888.7	1892.4	1897.4	1890.5	1886.8	1876.8	1869.3	1865.6	1867.4	1869.9
40°	2023.4	2024.0	2034.7	2035.9	2028.4	2024.0	2014.1	2002.8	1992.2	1992.2	1995.3
42.5°	2161.9	2163.8	2176.3	2180.7	2178.2	2170.1	2156.3	2142.6	2128.9	2131.4	2135.1
45°	2318.5	2316.1	2329.2	2339.8	2337.9	2335.4	2322.3	2297.3	2284.9	2284.2	2290.5
47.5°	2483.3	2488.3	2502.0	2520.1	2519.5	2513.2	2496.4	2473.3	2450.2	2452.1	2459.6
50°	2675.4	2682.3	2705.4	2723.5	2726.0	2724.1	2704.1	2677.3	2644.9	2646.7	2656.7
52.5°	2847.6	2857.6	2884.5	2921.9	2945.0	2955.6	2942.5	2917.5	2884.5	2886.3	2896.9
55°	3003.6	3019.2	3059.2	3110.3	3156.5	3199.5	3218.9	3218.3	3193.9	3199.5	3213.3
57.5°	3101.6	3123.4	3183.9	3266.3	3358.0	3444.8	3519.6	3590.1	3605.7	3635.1	3635.1
60°	2969.9	3021.1	3101.6	3242.6	3422.9	3617.6	3828.5	4033.7	4166.0	4270.2	4214.1
62.5°	2480.1	2555.6	2668.6	2854.5	3135.3	3482.8	3906.5	4383.8	4881.7	5186.2	4962.8
65°	1604.8	1699.6	1822.5	2031.5	2385.3	2832.7	3449.7	4307.7	5349.6	5890.0	5390.8
67.5°	635.8	700.1	774.9	923.4	1230.4	1669.7	2362.2	3420.4	4723.8	5233.6	4673.9
70°	303.9	314.5	328.8	360.6	437.4	590.2	949.0	1685.3	2896.9	3434.1	2827.7
72.5°	219.6	221.5	228.4	239.0	261.4	292.6	355.6	515.4	998.9	1452.5	1000.2
75°	166.6	169.1	172.8	178.4	190.3	205.3	229.0	274.5	341.9	394.3	341.3
77.5°	126.7	129.2	132.3	137.9	144.1	154.7	163.5	181.6	210.3	221.5	220.2
80°	92.3	96.7	101.7	106.7	111.1	116.1	116.7	125.4	141.6	152.2	149.1
82.5°	58.7	62.4	75.5	81.1	81.7	83.0	82.4	83.0	91.7	99.2	96.7
85°	37.4	39.9	46.8	53.0	51.8	54.3	54.3	53.0	49.3	42.4	50.5
87.5°	18.7	19.3	22.5	28.1	26.8	23.7	23.1	23.1	16.8	14.4	15.6
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3	1139.3
2.5°	1136.2	1137.4	1135.6	1135.6	1134.9	1136.2	1134.3	1134.3
5°	1144.9	1146.8	1146.2	1146.2	1147.4	1148.7	1148.0	1147.4
7.5°	1160.5	1161.8	1163.0	1163.6	1164.9	1164.3	1165.5	1164.9
10°	1184.2	1183.0	1184.9	1183.0	1183.6	1182.4	1183.0	1183.0
12.5°	1214.2	1212.3	1211.1	1209.8	1209.8	1207.3	1207.3	1207.9
15°	1248.5	1245.4	1242.9	1241.6	1240.4	1240.4	1238.5	1239.8
17.5°	1282.2	1279.1	1274.7	1274.7	1272.8	1271.6	1270.3	1273.5
20°	1317.8	1314.6	1312.1	1311.5	1307.8	1306.5	1307.1	1310.9
22.5°	1358.9	1357.1	1357.1	1355.8	1353.3	1351.4	1351.4	1355.8
25°	1414.5	1410.7	1411.3	1412.0	1410.7	1410.7	1409.5	1412.6
27.5°	1482.5	1479.4	1481.2	1482.5	1481.2	1483.1	1481.2	1483.7
30°	1562.3	1560.5	1562.3	1564.2	1561.1	1561.1	1559.8	1561.7
32.5°	1657.8	1655.3	1656.6	1656.6	1652.2	1648.4	1643.4	1647.2
35°	1762.6	1759.5	1762.0	1763.9	1758.9	1755.1	1747.6	1750.8
37.5°	1878.0	1879.3	1882.4	1890.5	1889.3	1883.0	1877.4	1879.9
40°	2007.2	2013.4	2027.2	2032.8	2031.5	2025.3	2017.8	2019.1
42.5°	2153.2	2161.3	2175.7	2185.0	2180.7	2171.9	2162.6	2166.3
45°	2312.3	2324.8	2343.5	2352.9	2347.2	2337.9	2324.8	2331.7
47.5°	2480.8	2505.7	2530.7	2543.2	2541.3	2528.2	2511.3	2513.2
50°	2682.3	2715.4	2747.2	2759.7	2750.3	2730.3	2706.6	2706.0
52.5°	2933.1	2968.7	2994.9	2991.8	2968.7	2937.5	2910.7	2909.4
55°	3246.3	3258.2	3254.5	3227.6	3187.1	3138.4	3104.1	3098.5
57.5°	3625.1	3585.1	3526.5	3445.4	3354.3	3261.9	3199.5	3176.5
60°	4088.0	3907.7	3698.1	3477.2	3275.7	3124.7	3029.2	2971.2
62.5°	4470.5	3948.3	3479.7	3096.0	2782.1	2595.6	2465.2	2384.7
65°	4339.5	3411.1	2732.2	2237.4	1894.9	1702.1	1564.2	1472.5
67.5°	3352.4	2279.2	1586.0	1099.4	833.6	705.7	616.4	558.4
70°	1690.2	874.1	529.7	373.7	319.5	297.0	282.0	273.3
72.5°	496.0	331.3	275.2	243.3	224.0	210.3	201.5	197.2
75°	274.5	224.0	197.8	179.7	167.2	157.9	152.2	148.5
77.5°	189.1	162.8	149.7	137.9	127.9	121.0	116.7	112.9
80°	132.3	119.2	113.6	107.3	99.8	94.2	88.0	85.5
82.5°	88.0	82.4	81.1	76.1	71.8	65.5	54.3	50.5
85°	51.8	51.2	51.2	49.3	46.2	40.6	32.4	32.4
87.5°	18.1	18.7	19.3	20.6	20.0	16.8	13.7	13.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)