

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: P198652

Luminaire Tested: **XNV-AF-01-LED-U-5NQ-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198652  
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: XNV-AF-01-LED-U-5NQ-800  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5138.3 lumens  
Efficiency: N/A  
Efficacy: 116.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B2 - U0 - G1

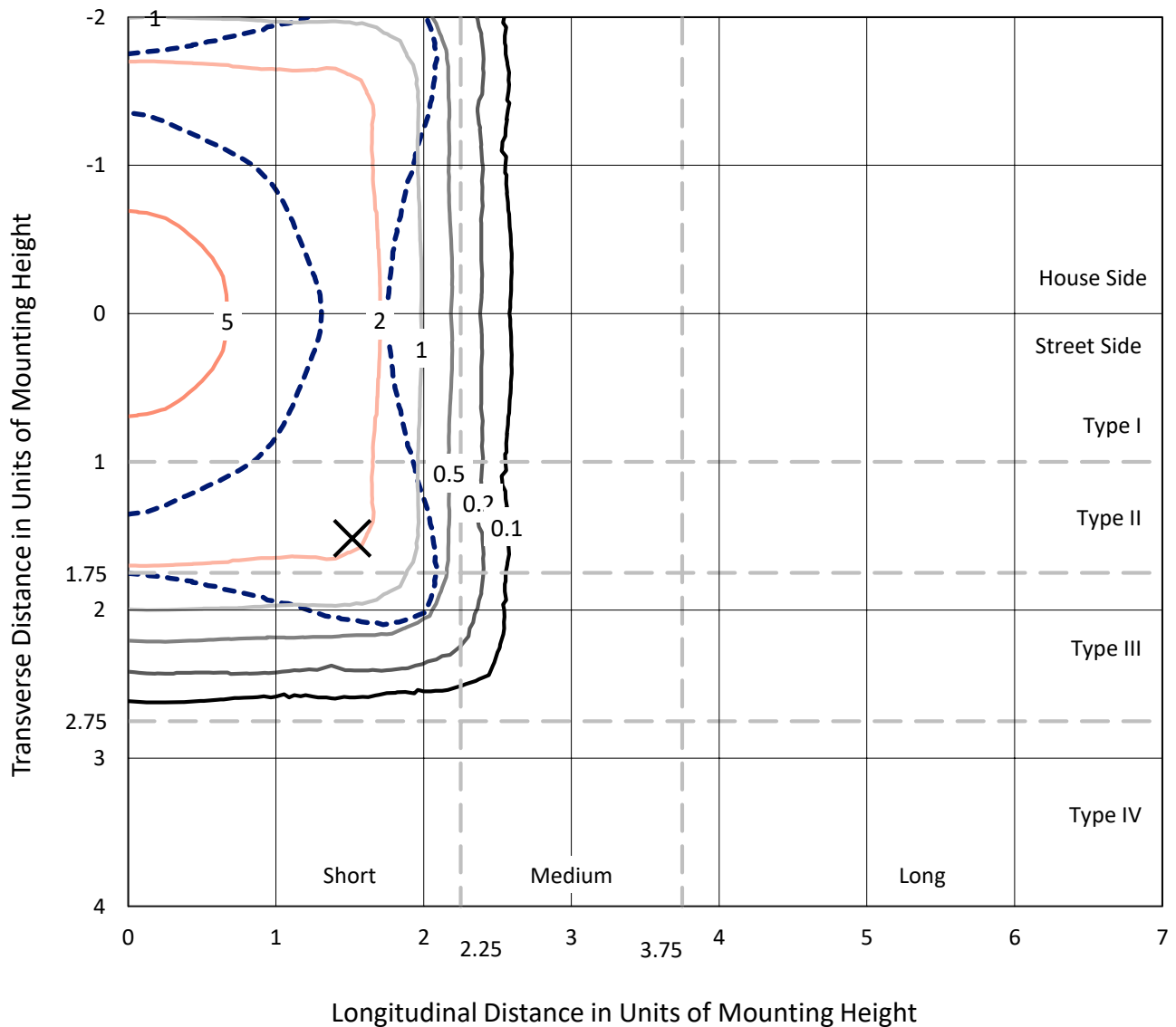
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

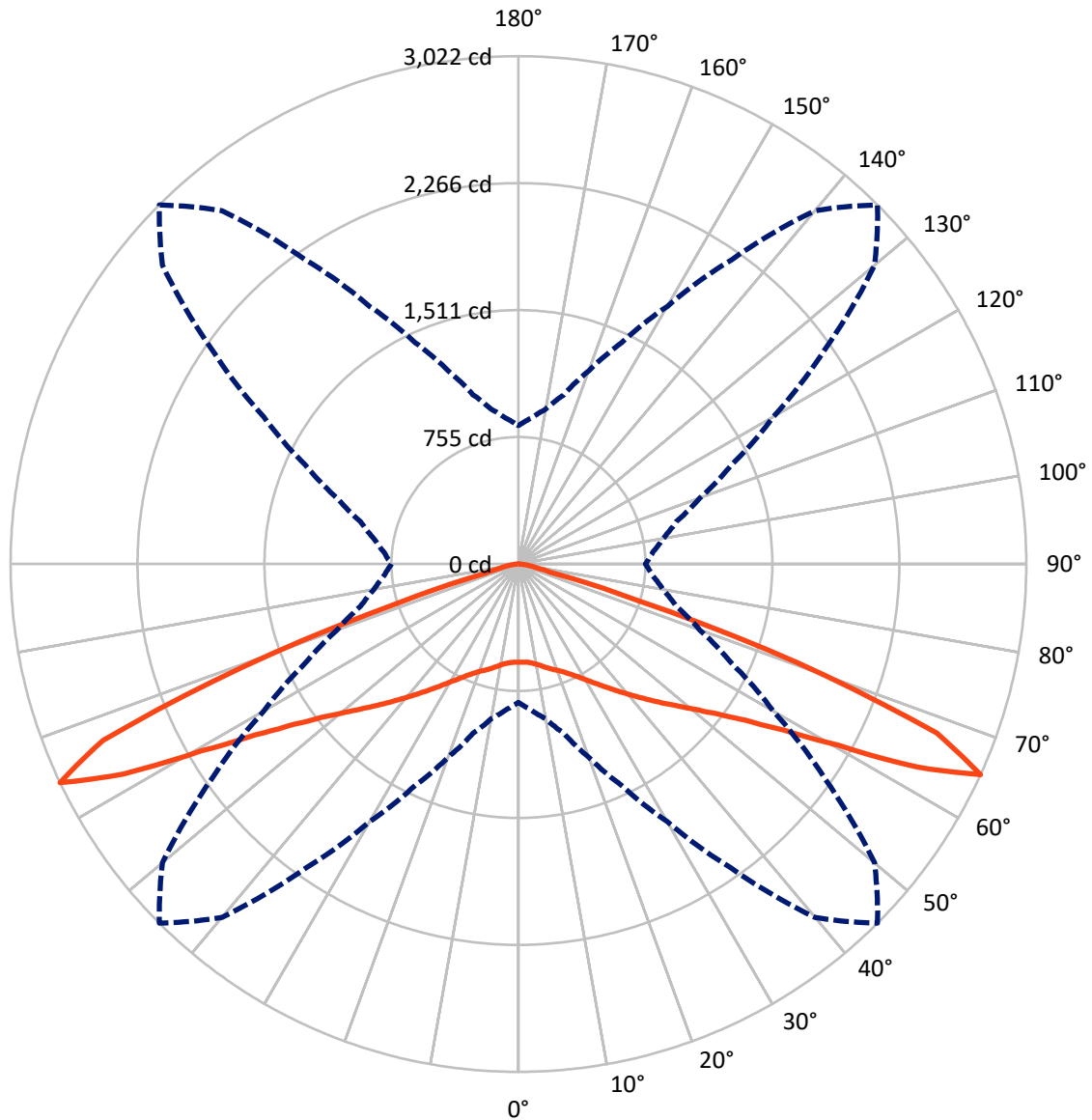
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 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	2569.1	0.0	2569.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2569.1	0.0	2569.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5138.3	0.0	5138.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.9	1.1
10°-20°	182.4	3.6
20°-30°	340.3	6.6
30°-40°	573.8	11.2
40°-50°	932.0	18.1
50°-60°	1460.3	28.4
60°-70°	1378.5	26.8
70°-80°	185.8	3.6
80°-90°	28.3	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°	5138.3	100.0
0°-180°	5138.3	100.0



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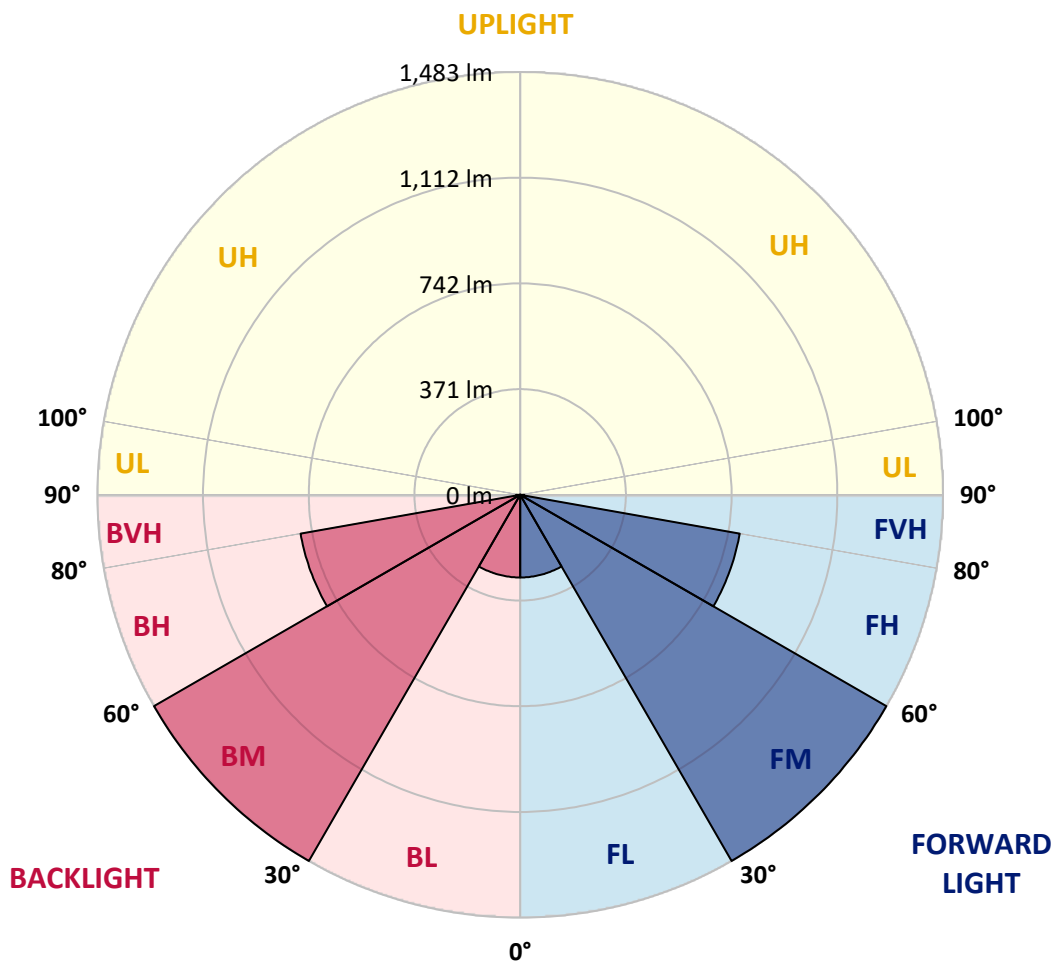
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	289.8	5.6			
FM	(30°-60°)	1483.1	28.9			
FH	(60°-80°)	782.1	15.2			G1/1800
FVH	(80°-90°)	14.2	0.3			G1/100
BL	(0°-30°)	289.8	5.6	B1/500		
BM	(30°-60°)	1483.1	28.9	B2/2500		
BH	(60°-80°)	782.1	15.2	B2/1000		G1/1800
BVH	(80°-90°)	14.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5
2.5°	589.3	589.3	590.2	589.9	588.6	587.7	586.8	585.4	584.8	584.1	583.8
5°	592.5	592.5	593.4	593.1	592.2	590.9	590.2	589.3	588.3	587.7	588.0
7.5°	600.5	600.8	601.1	600.8	599.9	598.8	597.6	597.3	596.0	595.1	595.7
10°	612.6	612.6	613.0	613.3	612.6	610.4	610.4	609.8	608.5	607.2	607.5
12.5°	626.0	626.0	626.5	626.5	626.5	625.1	625.4	625.1	623.5	622.9	623.5
15°	639.2	639.5	639.5	640.2	640.2	640.5	641.8	641.8	641.1	640.8	640.8
17.5°	654.6	655.2	655.5	656.5	656.8	657.5	658.8	659.1	659.4	658.4	658.8
20°	675.0	675.4	676.4	676.7	677.9	677.9	678.6	678.2	677.6	676.4	676.4
22.5°	698.1	698.8	700.6	700.6	702.3	701.3	701.6	700.6	699.1	698.5	697.8
25°	728.2	729.2	730.8	730.1	730.8	729.2	729.2	729.2	728.2	727.2	726.9
27.5°	766.3	764.7	766.3	765.0	764.7	763.4	763.7	763.1	762.1	761.8	760.6
30°	806.0	804.0	805.1	805.4	804.7	804.3	803.1	802.1	800.6	800.9	799.8
32.5°	851.4	849.5	850.5	850.8	850.2	850.8	850.5	848.2	846.3	847.6	847.6
35°	905.5	904.3	906.8	907.8	905.8	904.9	903.6	901.0	898.2	900.1	900.4
37.5°	970.5	968.9	970.8	973.3	969.9	967.9	962.8	959.0	957.1	958.0	959.3
40°	1038.0	1038.4	1043.8	1044.4	1040.5	1038.4	1033.2	1027.5	1022.0	1022.0	1023.7
42.5°	1109.1	1110.0	1116.4	1118.7	1117.4	1113.3	1106.2	1099.2	1092.1	1093.4	1095.4
45°	1189.4	1188.2	1194.9	1200.3	1199.3	1198.1	1191.3	1178.5	1172.1	1171.8	1175.1
47.5°	1274.0	1276.5	1283.5	1292.8	1292.5	1289.3	1280.6	1268.8	1257.0	1257.9	1261.8
50°	1372.5	1376.1	1387.8	1397.1	1398.5	1397.5	1387.2	1373.5	1356.8	1357.8	1362.9
52.5°	1460.9	1466.0	1479.7	1498.9	1510.8	1516.2	1509.5	1496.7	1479.7	1480.7	1486.1
55°	1540.9	1548.8	1569.4	1595.6	1619.3	1641.4	1651.3	1651.0	1638.5	1641.4	1648.4
57.5°	1591.1	1602.4	1633.3	1675.6	1722.6	1767.1	1805.6	1841.7	1849.8	1864.8	1864.8
60°	1523.6	1549.9	1591.1	1663.5	1756.0	1855.8	1964.1	2069.3	2137.3	2190.6	2161.8
62.5°	1272.3	1311.0	1369.0	1464.4	1608.4	1786.7	2004.1	2249.0	2504.4	2660.5	2545.9
65°	823.3	871.9	935.0	1042.2	1223.7	1453.2	1769.7	2209.9	2744.4	3021.6	2765.5
67.5°	326.1	359.2	397.5	473.7	631.2	856.5	1211.8	1754.7	2423.4	2684.8	2397.8
70°	155.9	161.3	168.7	185.1	224.3	302.8	486.8	864.6	1486.1	1761.7	1450.6
72.5°	112.6	113.6	117.1	122.5	134.1	150.2	182.5	264.4	512.5	745.1	513.1
75°	85.4	86.7	88.7	91.6	97.6	105.3	117.4	140.9	175.4	202.3	175.1
77.5°	65.0	66.3	67.8	70.8	74.0	79.4	83.9	93.2	107.8	113.6	113.0
80°	47.4	49.6	52.2	54.7	57.0	59.5	59.8	64.3	72.6	78.1	76.5
82.5°	30.1	32.0	38.8	41.6	41.9	42.6	42.2	42.6	47.1	50.9	49.6
85°	19.2	20.5	24.0	27.2	26.6	27.8	27.8	27.2	25.3	21.8	25.9
87.5°	9.6	9.9	11.6	14.4	13.8	12.2	11.9	11.9	8.6	7.4	8.0
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°	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5
2.5°	582.9	583.5	582.6	582.6	582.3	582.9	582.0	582.0
5°	587.4	588.3	588.0	588.0	588.6	589.3	588.9	588.6
7.5°	595.4	596.0	596.7	597.0	597.6	597.3	597.9	597.6
10°	607.5	606.9	607.8	606.9	607.2	606.6	606.9	606.9
12.5°	622.9	622.0	621.2	620.6	620.6	619.4	619.4	619.7
15°	640.5	638.9	637.6	637.0	636.4	636.4	635.4	636.0
17.5°	657.8	656.2	654.0	654.0	652.9	652.3	651.7	653.3
20°	676.1	674.4	673.1	672.8	670.9	670.2	670.5	672.5
22.5°	697.1	696.2	696.2	695.5	694.3	693.3	693.3	695.5
25°	725.7	723.7	724.0	724.4	723.7	723.7	723.0	724.7
27.5°	760.6	758.9	759.8	760.6	759.8	760.9	759.8	761.2
30°	801.5	800.6	801.5	802.4	800.9	800.9	800.3	801.2
32.5°	850.5	849.2	849.9	849.9	847.6	845.7	843.1	845.1
35°	904.3	902.7	903.9	904.9	902.3	900.4	896.5	898.2
37.5°	963.4	964.1	965.7	969.9	969.2	966.0	963.1	964.4
40°	1029.7	1032.9	1039.9	1042.8	1042.2	1039.0	1035.1	1035.8
42.5°	1104.6	1108.8	1116.1	1120.9	1118.7	1114.2	1109.4	1111.3
45°	1186.2	1192.7	1202.3	1207.1	1204.1	1199.3	1192.7	1196.1
47.5°	1272.7	1285.4	1298.2	1304.7	1303.8	1297.0	1288.3	1289.3
50°	1376.1	1393.1	1409.3	1415.8	1411.0	1400.7	1388.6	1388.2
52.5°	1504.8	1523.0	1536.4	1534.8	1523.0	1506.9	1493.2	1492.6
55°	1665.4	1671.5	1669.6	1655.7	1635.0	1610.0	1592.4	1589.6
57.5°	1859.7	1839.2	1809.1	1767.5	1720.8	1673.4	1641.4	1629.6
60°	2097.2	2004.7	1897.2	1783.8	1680.4	1603.0	1554.0	1524.2
62.5°	2293.4	2025.4	1785.2	1588.2	1427.2	1331.6	1264.7	1223.3
65°	2226.1	1749.9	1401.6	1147.9	972.1	873.2	802.4	755.4
67.5°	1719.8	1169.2	813.7	564.0	427.6	362.0	316.2	286.4
70°	867.2	448.5	271.8	191.7	163.9	152.3	144.6	140.2
72.5°	254.5	170.0	141.2	124.8	114.9	107.8	103.4	101.2
75°	140.9	114.9	101.5	92.2	85.8	81.0	78.1	76.2
77.5°	97.0	83.6	76.8	70.8	65.6	62.1	59.8	57.9
80°	67.8	61.2	58.2	55.0	51.2	48.3	45.1	43.9
82.5°	45.1	42.2	41.6	39.1	36.8	33.7	27.8	25.9
85°	26.6	26.3	26.3	25.3	23.7	20.8	16.7	16.7
87.5°	9.3	9.6	9.9	10.5	10.2	8.6	7.1	6.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)