

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: P271207

Luminaire Tested: **XNV-AF-01-LED-U-5NQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271207
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-7027-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 4363.6 lumens
Efficiency: N/A
Efficacy: 99.2 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

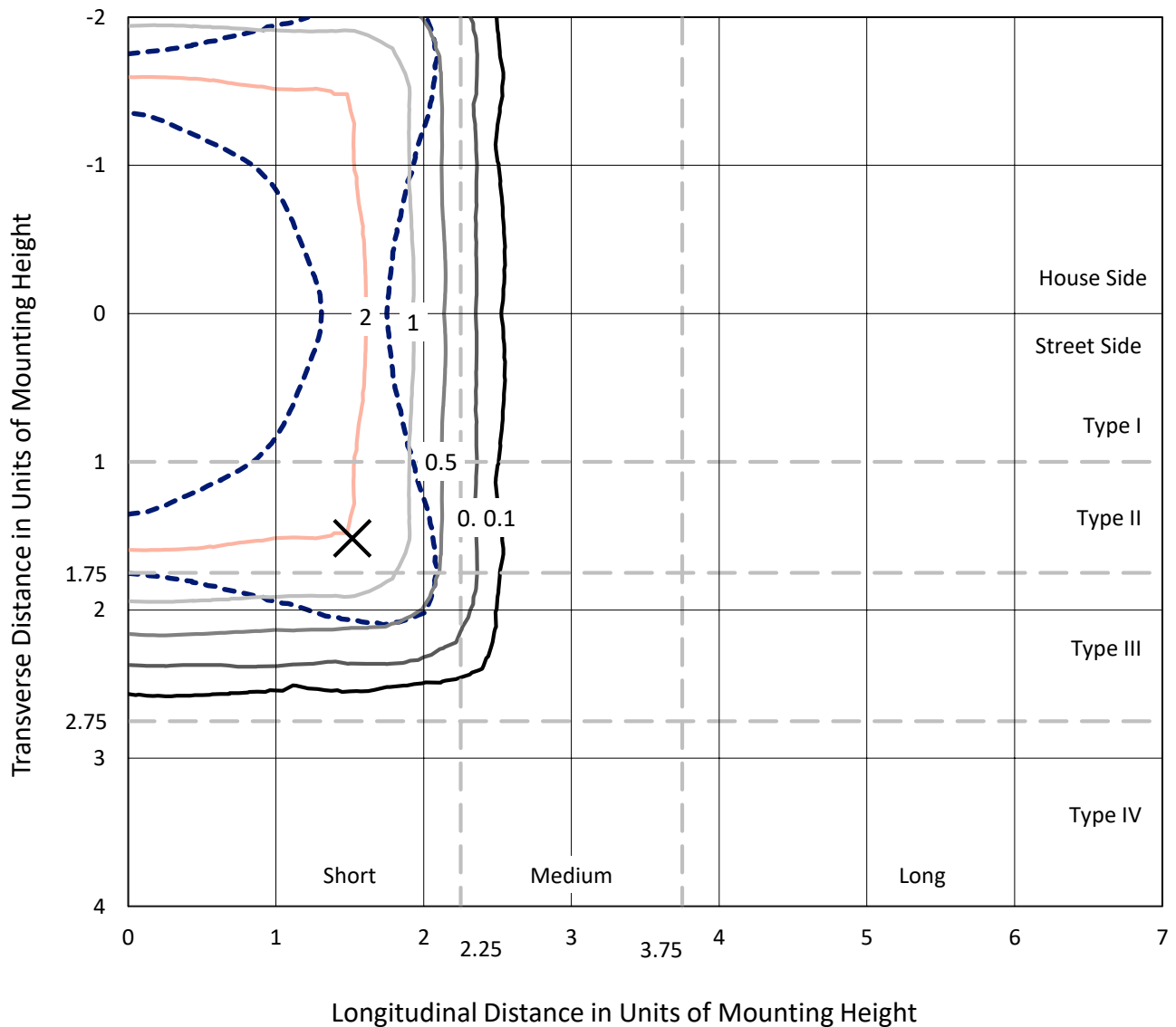


REPORT NUMBER: P271207

CATALOG NUMBER: XNV-AF-01-LED-U-5NQ-7027-800

Iso-Footcandle Lines of Horizontal Illumination

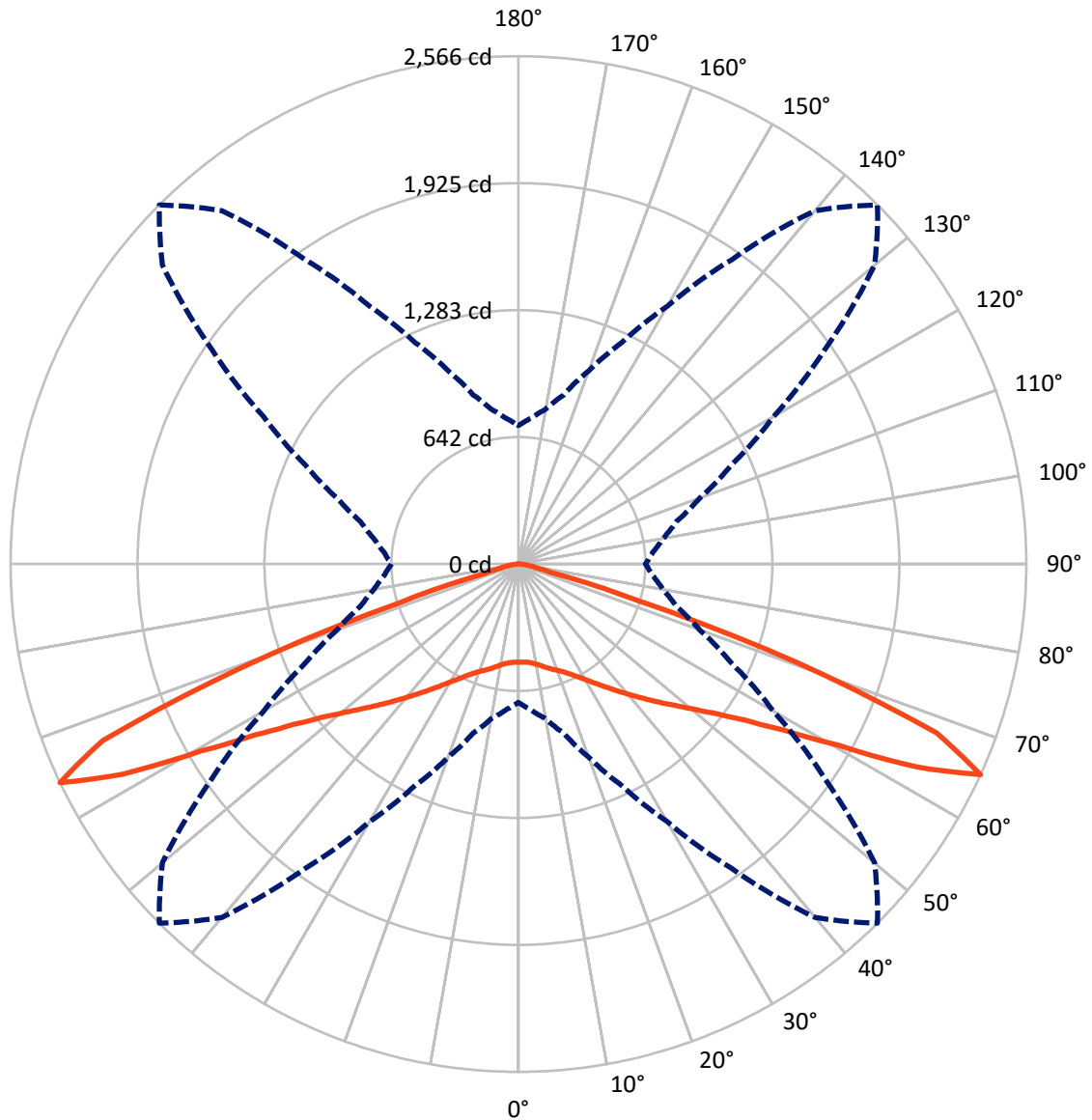
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P271207
CATALOG NUMBER: XNV-AF-01-LED-U-5NQ-7027-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P271207

CATALOG NUMBER: XNV-AF-01-LED-U-5NQ-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2181.8	0.0	2181.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2181.8	0.0	2181.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	4363.6	0.0	4363.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	1.1
10°-20°	154.9	3.6
20°-30°	289.0	6.6
30°-40°	487.3	11.2
40°-50°	791.5	18.1
50°-60°	1240.2	28.4
60°-70°	1170.6	26.8
70°-80°	157.8	3.6
80°-90°	24.0	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°	4363.6	100.0
0°-180°	4363.6	100.0



REPORT NUMBER: P271207

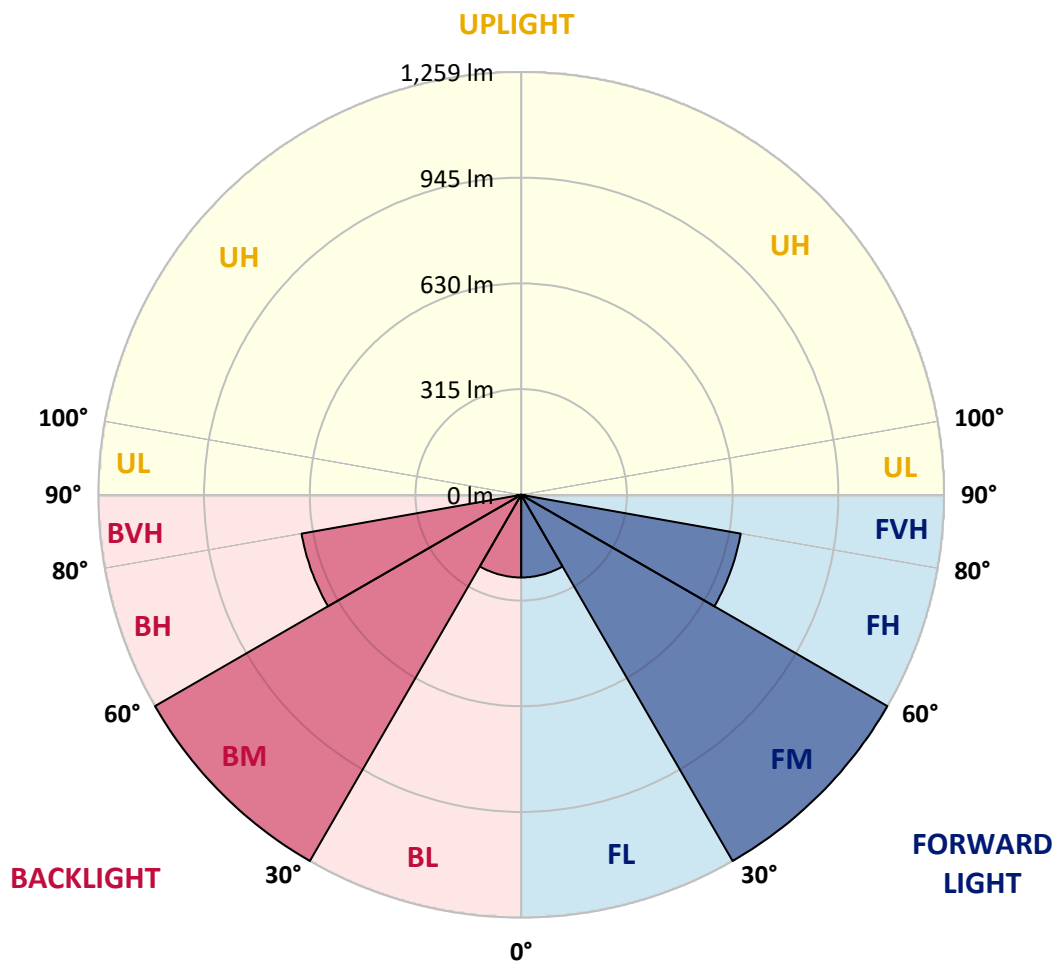
CATALOG NUMBER: XNV-AF-01-LED-U-5NQ-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	246.1	5.6			
FM	(30°-60°)	1259.5	28.9			
FH	(60°-80°)	664.2	15.2			G1/1800
FVH	(80°-90°)	12.0	0.3			G1/100
BL	(0°-30°)	246.1	5.6	B1/500		
BM	(30°-60°)	1259.5	28.9	B2/2500		
BH	(60°-80°)	664.2	15.2	B2/1000		G1/1800
BVH	(80°-90°)	12.0	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





REPORT NUMBER: P271207

CATALOG NUMBER: XNV-AF-01-LED-U-5NQ-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4
2.5°	500.4	500.4	501.3	501.0	499.8	499.1	498.3	497.2	496.7	496.1	495.9
5°	503.2	503.2	503.9	503.7	503.0	501.9	501.3	500.4	499.6	499.1	499.4
7.5°	510.0	510.2	510.4	510.2	509.3	508.6	507.5	507.3	506.1	505.3	505.8
10°	520.3	520.3	520.6	520.8	520.3	518.4	518.4	517.9	516.7	515.6	515.9
12.5°	531.6	531.6	531.9	531.9	531.9	530.9	531.2	530.9	529.6	529.0	529.6
15°	542.8	543.1	543.1	543.7	543.7	544.0	545.0	545.0	544.5	544.3	544.3
17.5°	556.0	556.4	556.7	557.5	557.8	558.3	559.5	559.7	560.0	559.1	559.5
20°	573.3	573.6	574.3	574.6	575.8	575.8	576.4	576.1	575.5	574.3	574.3
22.5°	592.8	593.4	595.0	595.0	596.4	595.5	595.8	595.0	593.7	593.2	592.6
25°	618.5	619.2	620.5	620.0	620.5	619.2	619.2	619.2	618.5	617.7	617.3
27.5°	650.7	649.5	650.7	649.7	649.5	648.2	648.5	648.0	647.1	647.0	645.9
30°	684.5	682.8	683.7	683.9	683.4	683.2	682.1	681.3	679.8	680.1	679.3
32.5°	723.0	721.3	722.2	722.5	722.0	722.5	722.2	720.4	718.7	719.8	719.8
35°	768.9	768.0	770.0	770.9	769.3	768.5	767.4	765.1	762.8	764.4	764.6
37.5°	824.1	822.8	824.5	826.6	823.7	821.9	817.6	814.5	812.7	813.5	814.7
40°	881.5	881.9	886.4	886.9	883.8	881.9	877.5	872.6	867.9	867.9	869.3
42.5°	942.0	942.7	948.2	950.0	949.0	945.5	939.4	933.5	927.5	928.6	930.3
45°	1010.1	1009.1	1014.7	1019.3	1018.6	1017.5	1011.8	1000.9	995.4	995.1	997.8
47.5°	1081.9	1084.1	1090.1	1097.9	1097.6	1094.9	1087.6	1077.5	1067.5	1068.3	1071.6
50°	1165.6	1168.5	1178.7	1186.5	1187.6	1186.8	1178.0	1166.4	1152.3	1153.2	1157.5
52.5°	1240.6	1245.1	1256.6	1273.0	1283.0	1287.7	1281.9	1271.1	1256.6	1257.4	1262.1
55°	1308.7	1315.4	1332.7	1355.1	1375.1	1393.9	1402.3	1402.2	1391.6	1393.9	1399.9
57.5°	1351.3	1360.8	1387.2	1423.0	1463.0	1500.8	1533.3	1564.0	1570.9	1583.7	1583.7
60°	1293.9	1316.1	1351.3	1412.8	1491.2	1576.0	1668.0	1757.4	1815.0	1860.4	1836.0
62.5°	1080.5	1113.4	1162.6	1243.7	1366.0	1517.3	1701.8	1909.8	2126.7	2259.4	2162.1
65°	699.2	740.5	794.0	885.1	1039.2	1234.1	1503.0	1876.6	2330.7	2566.1	2348.6
67.5°	276.9	305.0	337.7	402.4	536.1	727.4	1029.2	1490.2	2058.0	2280.1	2036.3
70°	132.4	137.0	143.3	157.2	190.5	257.2	413.5	734.3	1262.1	1496.1	1231.9
72.5°	95.7	96.5	99.5	104.2	113.8	127.5	155.0	224.5	435.1	632.9	435.8
75°	72.6	73.8	75.3	77.8	83.0	89.4	99.7	119.7	148.9	171.8	148.7
77.5°	55.2	56.2	57.6	60.0	62.8	67.5	71.2	79.1	91.5	96.5	95.9
80°	40.2	42.1	44.2	46.5	48.4	50.6	50.8	54.6	61.8	66.4	64.9
82.5°	25.5	27.2	32.9	35.4	35.7	36.1	35.9	36.1	40.0	43.2	42.1
85°	16.3	17.3	20.4	23.0	22.5	23.6	23.6	23.0	21.5	18.4	22.0
87.5°	8.2	8.4	9.8	12.2	11.7	10.3	10.1	10.1	7.4	6.3	6.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271207

CATALOG NUMBER: XNV-AF-01-LED-U-5NQ-7027-800

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4
2.5°	495.0	495.5	494.7	494.7	494.4	495.0	494.2	494.2
5°	498.7	499.6	499.4	499.4	499.8	500.4	500.1	499.8
7.5°	505.6	506.1	506.7	507.0	507.5	507.3	507.8	507.5
10°	515.9	515.4	516.2	515.4	515.6	515.1	515.4	515.4
12.5°	529.0	528.2	527.7	527.0	527.0	526.0	526.0	526.2
15°	544.0	542.5	541.5	540.9	540.4	540.4	539.6	540.2
17.5°	558.7	557.3	555.3	555.3	554.6	554.0	553.4	554.9
20°	574.0	572.8	571.6	571.4	569.7	569.3	569.4	571.1
22.5°	592.1	591.3	591.3	590.6	589.6	588.7	588.7	590.6
25°	616.2	614.6	614.9	615.2	614.6	614.6	614.1	615.3
27.5°	645.9	644.5	645.3	645.9	645.3	646.2	645.3	646.4
30°	680.6	679.8	680.6	681.5	680.1	680.1	679.6	680.3
32.5°	722.2	721.2	721.7	721.7	719.8	718.1	715.9	717.7
35°	768.0	766.6	767.6	768.5	766.3	764.6	761.5	762.8
37.5°	818.1	818.7	820.2	823.7	823.0	820.4	817.9	819.1
40°	874.5	877.1	883.2	885.5	885.1	882.3	879.1	879.6
42.5°	938.1	941.7	947.9	951.9	950.0	946.3	942.1	943.8
45°	1007.4	1012.7	1021.1	1025.1	1022.6	1018.6	1012.7	1015.9
47.5°	1080.8	1091.7	1102.5	1108.0	1107.3	1101.4	1094.1	1094.9
50°	1168.5	1183.0	1196.9	1202.3	1198.2	1189.5	1179.1	1178.9
52.5°	1277.8	1293.4	1304.8	1303.4	1293.4	1279.7	1268.0	1267.6
55°	1414.3	1419.5	1417.9	1406.1	1388.5	1367.3	1352.4	1350.0
57.5°	1579.3	1562.0	1536.5	1501.1	1461.4	1421.1	1393.9	1383.8
60°	1781.0	1702.5	1611.1	1514.9	1427.0	1361.3	1319.7	1294.5
62.5°	1947.6	1720.2	1516.0	1348.8	1212.2	1130.7	1074.1	1038.9
65°	1890.7	1486.1	1190.3	974.8	825.5	741.6	681.5	641.5
67.5°	1460.6	992.9	690.9	478.9	363.2	307.4	268.6	243.4
70°	736.4	380.8	230.8	162.9	139.1	129.4	122.9	119.0
72.5°	216.1	144.4	119.8	106.0	97.6	91.5	87.9	85.9
75°	119.7	97.6	86.1	78.3	72.9	68.8	66.4	64.7
77.5°	82.4	71.0	65.2	60.0	55.8	52.7	50.8	49.1
80°	57.6	51.9	49.4	46.7	43.5	41.1	38.4	37.2
82.5°	38.4	35.9	35.4	33.1	31.4	28.6	23.6	22.0
85°	22.5	22.3	22.3	21.5	20.1	17.6	14.2	14.2
87.5°	7.8	8.2	8.4	9.0	8.8	7.4	6.0	5.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)