

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: P271203

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271203
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: XNV-AF-01-LED-U-5MQ-7027-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4521.7 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - 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

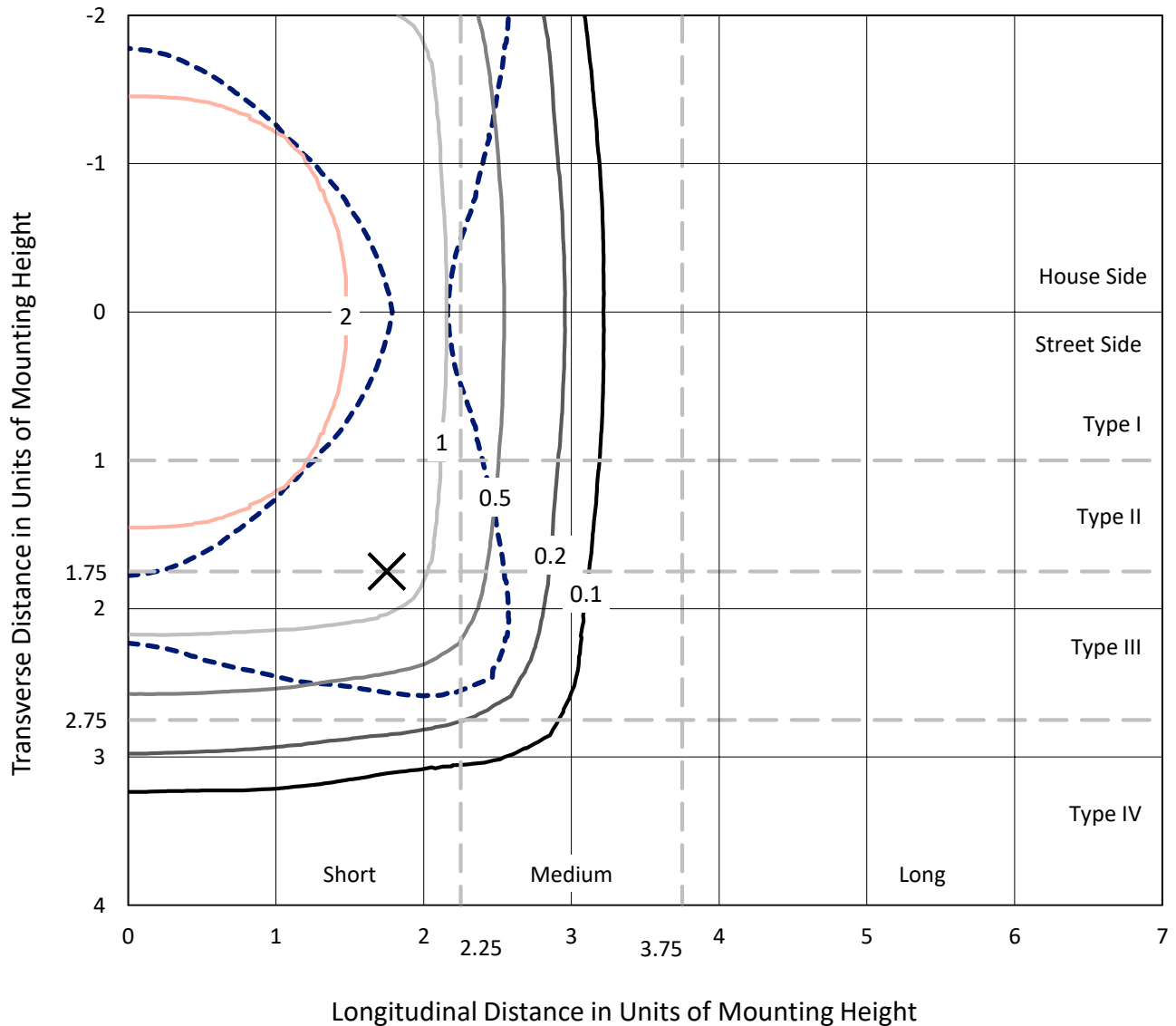


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

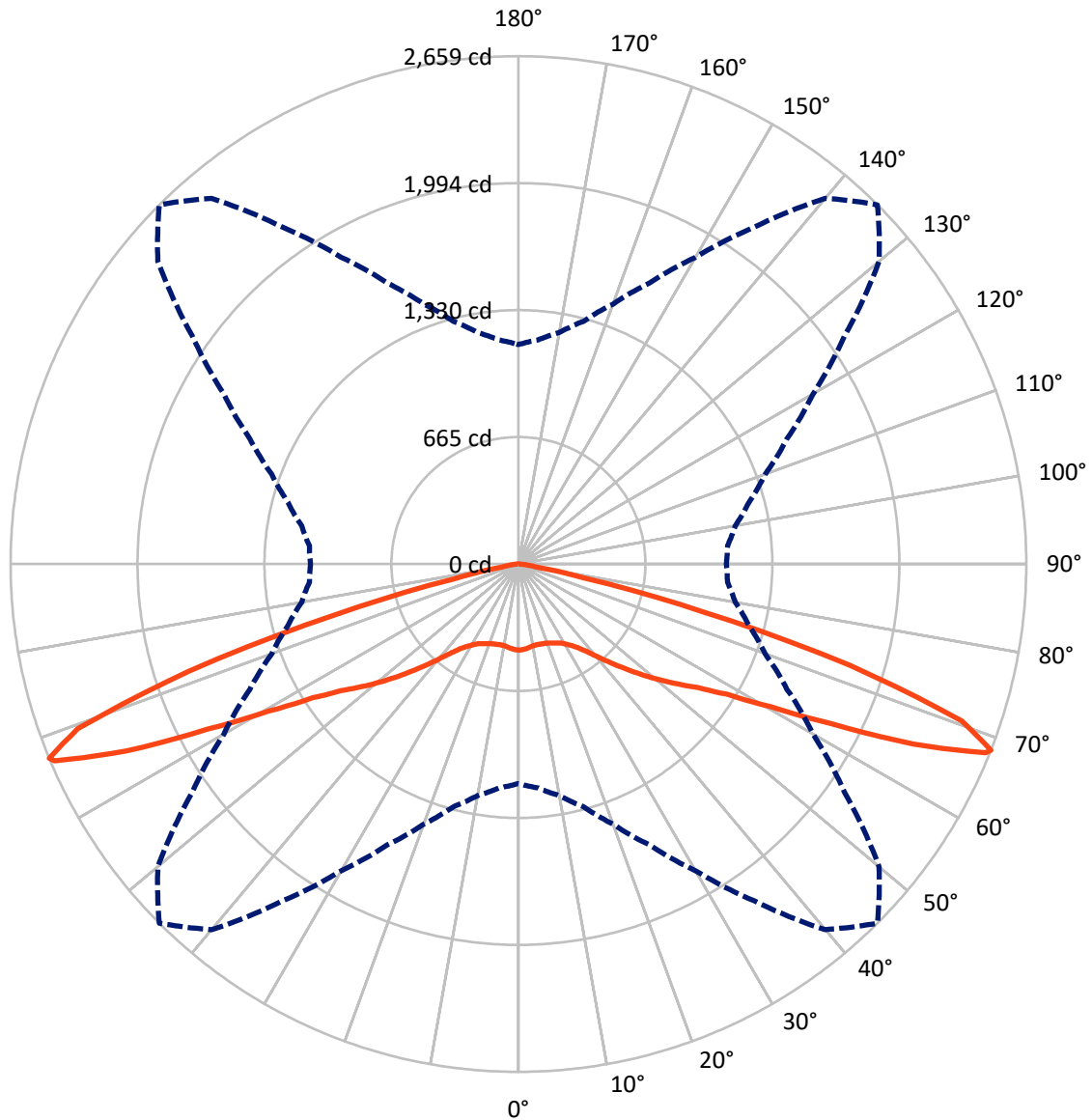


Based on 10 foot mounting height. Maximum calculated value = 4.5 fc
 Type V - Short - Full Cutoff

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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
House Side	Lumens	2260.8	0.0	2260.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2260.8	0.0	2260.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	4521.7	0.0	4521.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.2	0.9
10°-20°	122.4	2.7
20°-30°	208.1	4.6
30°-40°	340.6	7.5
40°-50°	608.6	13.5
50°-60°	1027.9	22.7
60°-70°	1593.8	35.2
70°-80°	548.0	12.1
80°-90°	30.1	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°	4521.7	100.0
0°-180°	4521.7	100.0



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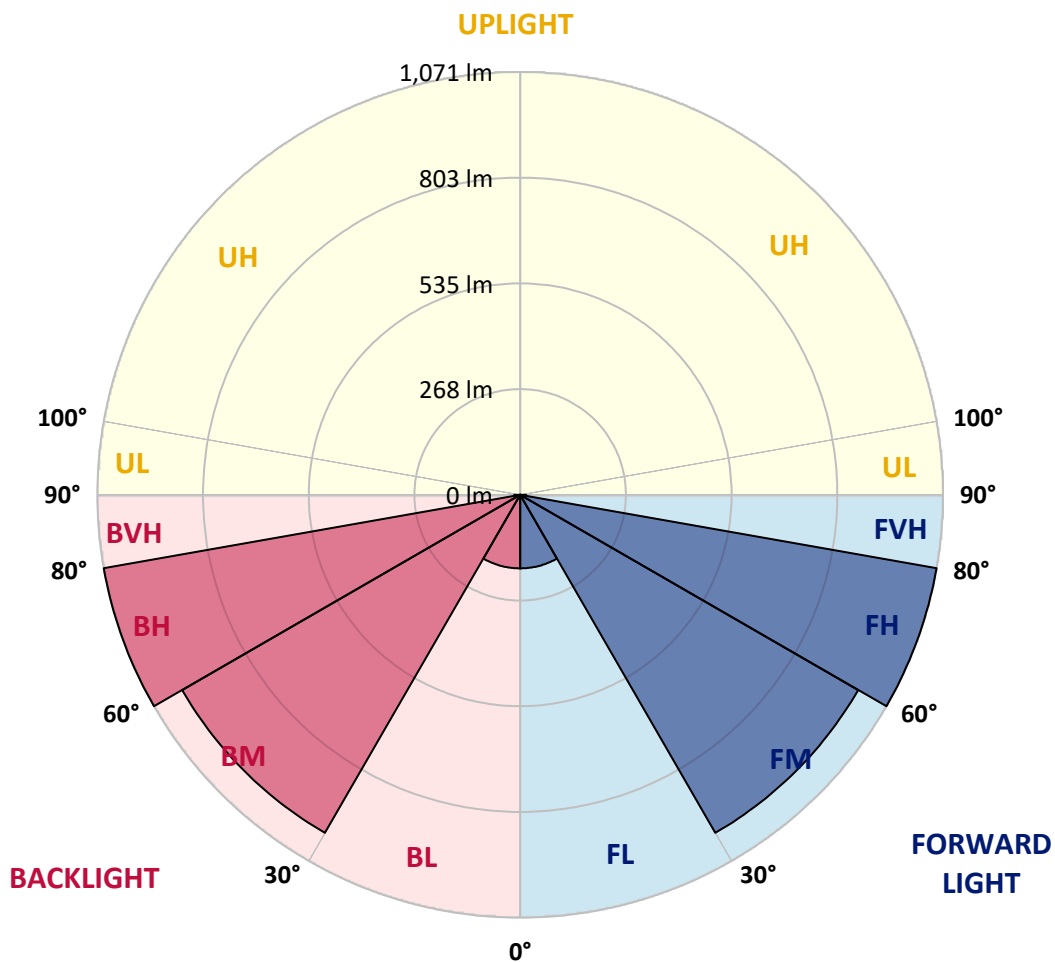
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	186.4	4.1			
FM	(30°-60°)	988.5	21.9			
FH	(60°-80°)	1070.9	23.7			G1/1800
FVH	(80°-90°)	15.1	0.3			G1/100
BL	(0°-30°)	186.4	4.1	B1/500		
BM	(30°-60°)	988.5	21.9	B1/1000		
BH	(60°-80°)	1070.9	23.7	B3/2500		G1/1800
BVH	(80°-90°)	15.1	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°	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0
2.5°	452.9	452.9	453.6	453.3	452.4	451.6	450.8	450.0	449.4	448.9	448.3
5°	448.3	448.3	449.2	448.6	448.1	447.1	446.5	445.7	445.2	444.8	445.0
7.5°	442.1	442.8	443.4	443.0	442.0	441.6	440.8	440.4	440.0	439.1	439.5
10°	436.9	437.2	437.7	437.5	437.2	436.3	436.0	435.8	435.6	434.4	434.2
12.5°	431.6	432.3	432.8	433.1	432.8	433.1	433.3	433.6	433.3	432.8	432.8
15°	427.6	428.0	428.9	429.7	430.0	431.6	432.8	433.9	434.7	435.0	434.2
17.5°	425.3	426.2	427.2	428.9	430.3	432.3	434.2	435.8	437.2	437.5	436.7
20°	425.0	425.8	427.6	429.5	431.9	434.4	437.5	440.0	441.3	442.1	441.3
22.5°	427.0	428.0	430.3	432.8	435.8	439.1	443.0	445.7	448.6	449.7	448.9
25°	432.5	433.6	436.0	439.1	442.4	446.5	450.5	454.2	456.9	458.2	457.1
27.5°	444.1	444.4	447.1	450.5	454.4	458.0	462.9	464.7	466.8	468.2	466.8
30°	460.6	461.0	463.5	468.7	472.4	477.1	479.9	481.5	483.9	485.4	483.7
32.5°	485.4	486.0	488.1	493.1	496.5	500.0	503.4	504.5	507.0	508.6	506.7
35°	520.6	521.6	523.6	526.9	529.7	532.4	534.9	534.1	535.7	537.9	536.1
37.5°	568.7	568.4	568.9	571.5	574.2	576.0	579.8	577.9	579.5	581.5	580.3
40°	625.0	625.0	624.6	629.2	630.3	631.9	636.0	633.6	635.7	637.9	636.0
42.5°	688.9	690.0	691.3	695.0	698.1	698.6	700.5	699.4	702.1	704.1	702.1
45°	762.5	764.2	765.9	774.2	775.5	776.7	778.0	774.5	777.6	779.2	778.7
47.5°	838.9	842.0	845.7	854.2	859.8	862.3	863.4	859.1	859.5	862.0	862.3
50°	925.3	928.7	932.4	942.0	947.3	951.7	953.0	948.3	948.9	950.9	951.3
52.5°	1005.2	1008.9	1016.7	1029.7	1037.3	1045.0	1045.5	1039.7	1042.3	1043.7	1042.6
55°	1080.1	1085.2	1095.4	1112.8	1126.4	1141.7	1148.6	1142.1	1142.1	1141.0	1140.5
57.5°	1167.6	1173.1	1183.6	1203.9	1222.8	1244.6	1263.5	1269.8	1281.4	1285.4	1279.2
60°	1299.5	1305.2	1316.0	1342.6	1366.4	1398.3	1429.4	1454.4	1495.5	1517.6	1497.7
62.5°	1420.0	1428.8	1454.3	1500.8	1552.2	1611.2	1679.7	1728.2	1802.8	1839.9	1789.9
65°	1392.5	1410.5	1460.4	1533.3	1639.8	1767.7	1906.9	2040.7	2194.6	2273.5	2171.7
67.5°	1216.3	1231.5	1285.4	1370.4	1503.0	1679.3	1895.9	2172.7	2490.3	2638.2	2457.9
68°	1149.1	1177.6	1231.0	1315.5	1449.2	1622.6	1853.7	2152.8	2499.4	2659.3	2464.6
70°	881.1	891.3	942.5	1018.4	1162.6	1332.6	1566.0	1906.9	2298.8	2463.2	2263.0
72.5°	418.7	424.8	458.0	532.8	624.4	762.8	968.8	1290.2	1643.3	1814.4	1614.9
75°	153.4	154.8	162.6	180.3	214.5	266.6	365.5	565.5	837.0	998.1	840.4
77.5°	82.9	83.1	86.1	90.5	96.7	103.6	118.4	158.9	256.3	348.9	270.7
80°	52.0	51.8	54.8	58.4	62.6	65.8	67.4	72.0	81.1	95.0	87.2
82.5°	26.6	29.0	36.0	39.9	46.0	47.2	45.6	45.5	48.1	52.0	53.7
85°	14.7	13.0	19.1	25.5	27.7	28.6	28.7	27.0	26.6	26.1	27.4
87.5°	7.5	6.9	8.4	12.8	13.6	11.0	11.4	9.7	6.6	6.6	6.9
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°	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0
2.5°	447.7	448.1	447.4	447.4	447.4	447.7	447.4	447.1
5°	444.1	444.8	444.8	445.0	445.2	445.2	445.2	445.2
7.5°	438.8	439.1	439.7	439.7	439.7	439.7	439.7	439.7
10°	433.9	433.3	433.1	432.5	432.5	431.6	431.9	432.3
12.5°	431.4	430.3	429.7	428.9	428.3	427.6	427.6	427.9
15°	432.5	430.8	429.2	428.6	428.0	427.6	427.0	427.2
17.5°	434.7	432.8	430.8	429.7	428.6	427.9	427.6	427.9
20°	439.5	436.7	433.6	431.6	429.5	428.9	428.0	428.9
22.5°	445.7	442.4	438.6	435.0	432.5	431.4	430.3	431.0
25°	453.6	450.0	446.1	442.0	439.1	438.4	436.9	436.9
27.5°	464.3	461.3	458.0	454.2	451.3	450.5	448.3	448.3
30°	481.5	478.4	475.5	472.1	469.4	468.5	465.7	465.7
32.5°	504.2	500.9	499.0	496.1	494.0	492.6	489.2	488.9
35°	534.8	531.6	531.3	529.5	527.1	527.5	524.2	523.6
37.5°	578.4	576.0	576.7	575.0	573.2	574.8	572.8	572.8
40°	634.4	633.6	634.4	633.2	633.6	633.8	632.1	632.6
42.5°	701.9	699.7	704.7	704.1	703.4	705.4	701.7	698.9
45°	779.6	778.9	784.0	784.7	783.1	784.4	777.6	777.3
47.5°	864.2	864.2	868.7	868.0	866.3	866.7	858.4	853.1
50°	952.3	951.7	956.1	955.0	952.8	952.6	943.8	938.6
52.5°	1043.9	1043.9	1050.3	1047.2	1041.9	1039.5	1028.9	1022.0
55°	1145.2	1143.8	1145.8	1135.7	1125.5	1118.1	1105.0	1099.9
57.5°	1273.3	1257.4	1243.6	1230.8	1216.3	1207.5	1192.3	1186.8
60°	1455.3	1412.5	1393.9	1368.4	1344.6	1332.6	1312.5	1301.6
62.5°	1707.3	1636.2	1585.8	1529.5	1475.2	1437.1	1406.3	1392.7
65°	1998.5	1843.5	1715.4	1594.9	1492.8	1411.5	1366.4	1352.3
67.5°	2109.3	1824.6	1603.5	1430.7	1306.7	1209.9	1155.9	1144.7
68°	2085.9	1781.5	1551.7	1374.8	1250.1	1152.6	1098.9	1088.7
70°	1839.9	1503.0	1260.4	1084.3	968.1	875.3	837.3	821.1
72.5°	1254.4	965.1	740.5	592.3	505.3	446.5	411.8	399.8
75°	577.3	390.1	260.6	194.7	165.3	151.2	140.3	137.6
77.5°	168.3	122.3	105.2	97.5	91.6	86.6	83.1	82.9
80°	79.9	75.1	72.9	67.8	62.6	57.9	54.5	55.1
82.5°	53.7	52.3	52.3	47.3	39.0	33.4	27.7	25.0
85°	28.6	29.6	31.4	29.6	25.7	19.1	12.4	13.6
87.5°	9.7	11.0	11.6	11.4	10.2	7.7	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)