

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: LUMARK

Report Number: P196519

Luminaire Tested: **NAV-AF-01-D-UNV-RW-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196519
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-01-D-UNV-RW-7030-800
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4878.4 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

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: 25 FT

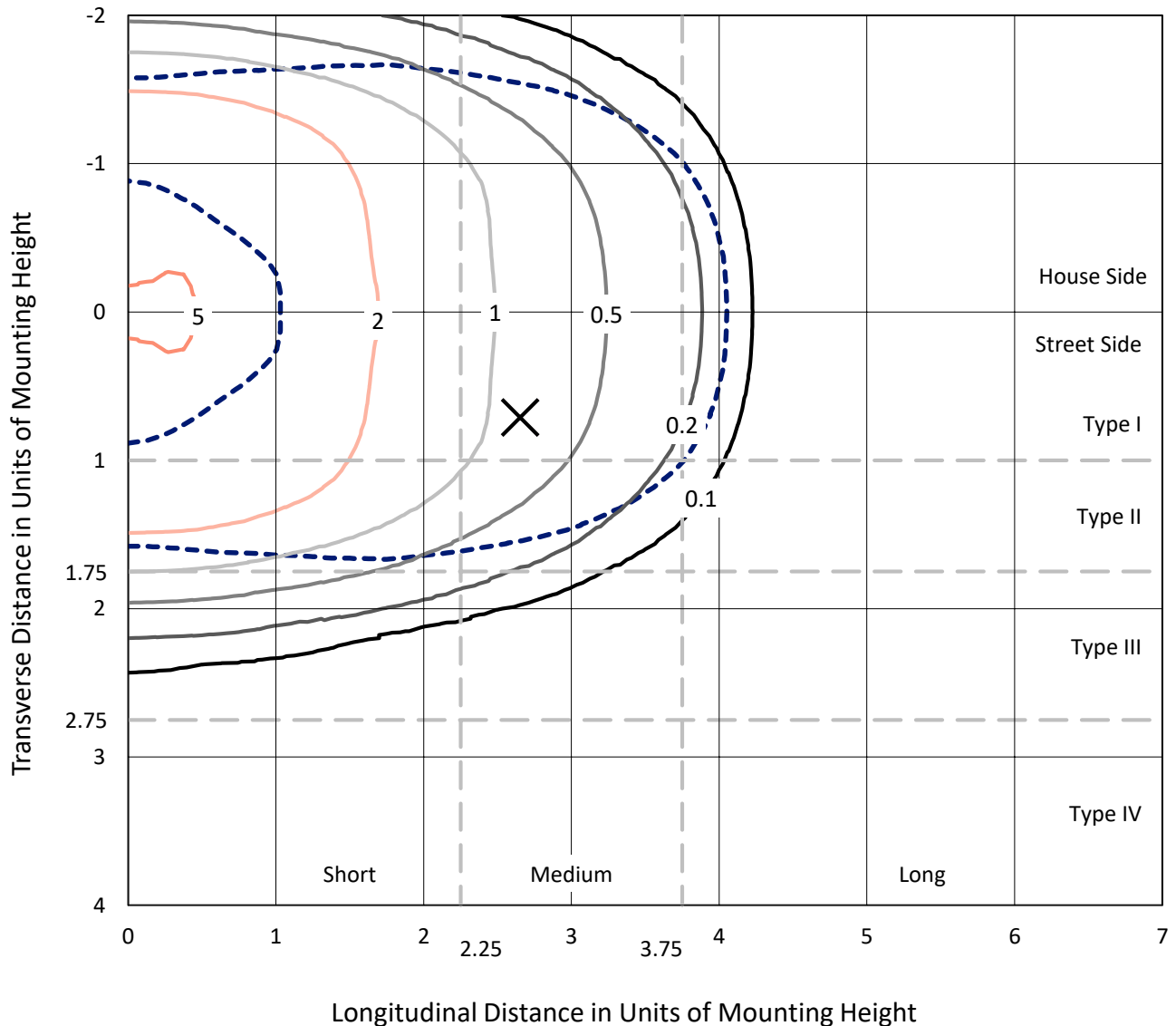


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Iso-Footcandle Lines of Horizontal Illumination

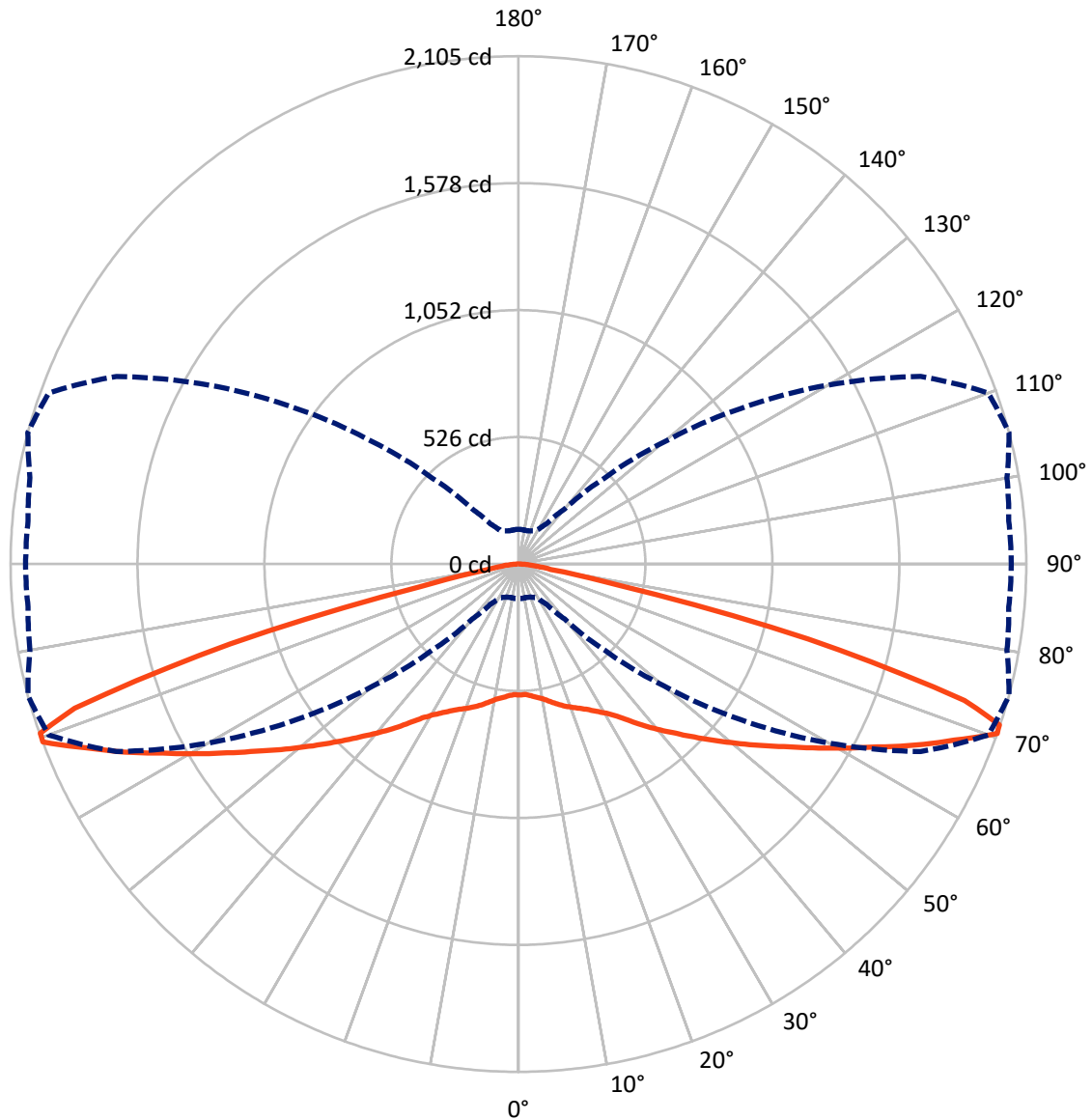
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2439.2	0.0	2439.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2439.2	0.0	2439.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	4878.4	0.0	4878.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.1
10°-20°	161.6	3.3
20°-30°	303.5	6.2
30°-40°	534.7	11.0
40°-50°	886.1	18.2
50°-60°	1232.7	25.3
60°-70°	1163.7	23.9
70°-80°	497.0	10.2
80°-90°	47.0	1.0
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°	4878.4	100.0
0°-180°	4878.4	100.0



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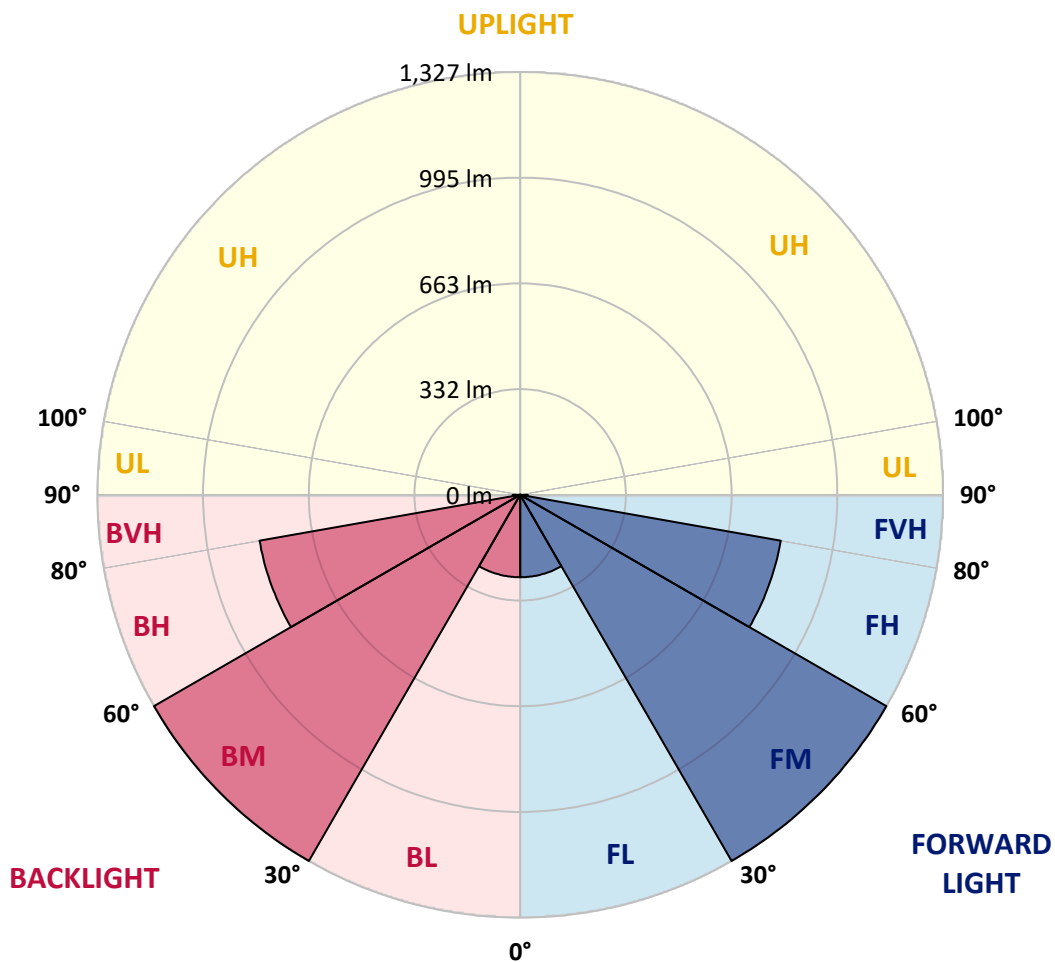
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	258.6	5.3			
FM	(30°-60°)	1326.7	27.2			
FH	(60°-80°)	830.4	17.0			G1/1800
FVH	(80°-90°)	23.5	0.5			G1/100
BL	(0°-30°)	258.6	5.3	B1/500		
BM	(30°-60°)	1326.7	27.2	B2/2500		
BH	(60°-80°)	830.4	17.0	B2/1000		G2/1000
BVH	(80°-90°)	23.5	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2
2.5°	546.7	546.3	546.7	545.8	546.0	545.8	545.8	544.4	544.4	543.9	542.9
5°	540.5	541.2	541.2	541.2	542.0	542.0	543.2	543.6	544.4	545.4	546.0
7.5°	530.5	530.7	531.6	532.2	534.1	536.6	538.9	541.7	544.2	547.3	550.5
10°	521.8	522.5	524.0	525.5	529.0	532.0	536.3	540.5	544.7	550.0	555.1
12.5°	517.3	518.2	520.6	523.2	528.3	532.2	538.1	544.7	550.5	555.5	561.3
15°	517.9	518.2	521.6	524.9	532.2	537.8	546.0	554.0	561.0	566.5	573.2
17.5°	526.7	527.4	530.7	535.6	542.7	549.7	558.6	566.8	576.3	582.7	590.6
20°	544.2	545.1	548.8	554.0	561.6	568.9	578.1	586.7	596.4	604.1	612.1
22.5°	566.8	568.3	572.3	578.7	586.4	595.3	604.8	613.6	622.8	630.4	637.1
25°	597.1	598.8	603.2	609.5	617.2	626.7	636.6	645.7	655.1	660.9	666.5
27.5°	637.7	640.8	645.4	650.5	657.3	667.3	676.6	684.2	693.4	699.8	703.4
30°	692.4	696.7	700.4	706.0	710.8	721.5	728.9	735.0	742.0	745.7	746.6
32.5°	759.4	763.4	767.0	771.1	777.7	787.5	794.6	797.9	801.6	801.0	797.6
35°	835.0	838.0	840.1	847.2	858.1	864.6	869.8	871.1	871.6	865.3	858.8
37.5°	914.4	918.1	919.9	930.9	941.3	948.6	951.1	953.9	951.9	941.3	929.7
40°	1000.3	1004.3	1009.8	1019.3	1031.5	1038.5	1041.6	1041.2	1039.7	1027.2	1008.3
42.5°	1084.7	1089.6	1094.1	1110.6	1120.8	1132.7	1134.2	1133.9	1130.5	1116.2	1094.1
45°	1156.2	1162.1	1171.5	1189.9	1206.0	1220.4	1226.2	1228.4	1225.1	1209.7	1184.7
47.5°	1215.2	1219.3	1231.2	1253.4	1274.2	1295.4	1307.0	1315.2	1314.9	1303.9	1277.2
50°	1255.6	1260.2	1274.8	1299.8	1325.9	1350.7	1373.6	1392.3	1401.1	1393.2	1368.4
52.5°	1267.2	1273.0	1292.3	1322.2	1352.5	1385.9	1420.1	1453.0	1473.0	1477.8	1458.6
55°	1218.2	1224.7	1252.8	1294.4	1344.2	1393.5	1445.4	1492.5	1533.5	1552.5	1544.8
57.5°	1075.7	1080.3	1116.2	1169.9	1241.1	1327.7	1415.1	1501.3	1571.7	1620.9	1629.5
60°	850.8	856.6	895.7	952.6	1033.6	1143.1	1265.3	1406.6	1544.5	1657.3	1713.3
62.5°	574.1	578.1	615.6	667.7	756.3	861.8	998.2	1177.0	1373.6	1575.1	1732.9
65°	301.4	301.4	326.8	363.2	433.8	528.3	668.0	851.4	1085.3	1336.9	1600.7
67.5°	175.0	174.6	180.4	188.6	211.0	249.1	326.2	461.1	682.4	975.2	1275.5
70°	144.3	143.3	142.5	142.5	145.9	151.7	166.3	203.3	297.5	502.9	784.8
71°	137.8	137.2	134.8	134.0	135.5	138.5	144.9	162.0	211.2	343.0	586.0
72.5°	130.2	128.7	125.0	123.5	123.8	125.0	126.8	133.7	148.6	195.0	334.2
75°	118.6	114.9	110.4	108.2	107.3	107.0	107.0	108.8	112.2	117.7	137.0
77.5°	105.2	100.0	95.0	93.0	91.4	90.4	89.9	88.6	88.1	90.4	97.6
80°	88.9	83.5	79.5	78.2	77.3	75.5	73.1	70.6	69.1	70.4	74.7
82.5°	68.9	63.3	63.9	64.3	62.8	59.6	57.2	54.4	51.7	51.1	53.2
85°	54.7	52.0	50.1	54.1	50.7	47.1	43.7	39.2	32.7	26.9	29.4
87.5°	23.5	23.8	34.2	51.7	45.3	36.4	30.3	24.5	15.7	11.6	11.9
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°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2
2.5°	542.7	542.7	541.7	541.2	541.2	541.2	540.5	540.9
5°	546.3	547.0	547.5	547.3	548.2	549.0	548.8	548.5
7.5°	552.5	554.3	556.1	557.0	558.2	559.5	559.7	558.9
10°	558.6	562.2	565.0	567.4	568.9	570.2	571.1	570.8
12.5°	566.2	571.4	576.3	581.1	584.5	586.4	588.3	587.6
15°	578.7	584.5	590.6	597.1	602.2	605.0	607.8	607.2
17.5°	595.8	601.0	606.0	612.4	618.7	621.8	624.9	624.6
20°	617.2	621.2	624.0	627.5	633.7	637.1	639.8	638.9
22.5°	641.7	642.9	643.2	644.4	649.3	653.4	656.9	657.8
25°	668.3	667.3	665.5	664.7	668.0	672.3	676.9	678.1
27.5°	701.3	698.2	693.7	690.0	690.9	696.4	701.7	702.9
30°	742.9	735.9	726.0	719.0	717.9	723.7	729.1	731.0
32.5°	790.3	780.7	767.3	756.6	752.0	757.2	762.2	765.0
35°	846.5	836.2	819.9	806.3	798.8	802.2	810.8	813.9
37.5°	913.2	898.7	880.7	863.3	851.1	851.6	860.9	864.6
40°	986.8	966.1	943.1	921.4	903.7	902.5	910.7	913.5
42.5°	1063.6	1037.0	1010.1	981.7	959.7	955.7	966.4	966.7
45°	1146.1	1111.9	1078.6	1045.5	1022.6	1015.6	1026.0	1027.2
47.5°	1234.2	1191.4	1151.9	1116.2	1091.4	1080.3	1090.5	1092.4
50°	1325.9	1281.6	1235.7	1196.0	1166.9	1153.4	1165.4	1166.7
52.5°	1416.6	1374.8	1329.2	1283.7	1248.5	1233.3	1247.3	1251.6
55°	1508.1	1467.8	1425.0	1379.4	1335.0	1321.6	1336.9	1341.4
57.5°	1603.2	1564.4	1525.5	1479.7	1436.5	1416.1	1432.6	1439.1
60°	1708.0	1673.9	1637.1	1591.0	1548.4	1524.6	1538.7	1546.0
62.5°	1811.1	1804.1	1770.8	1722.7	1668.9	1645.1	1657.0	1662.2
65°	1819.6	1933.7	1932.1	1884.4	1809.3	1769.2	1772.5	1775.0
67.5°	1588.2	1849.9	2017.2	2032.1	1948.3	1885.7	1878.2	1879.8
70°	1124.4	1483.6	1838.7	2071.5	2104.6	2055.9	2040.1	2042.5
71°	901.0	1273.0	1663.7	1977.0	2102.1	2088.1	2079.2	2085.6
72.5°	575.0	938.0	1318.2	1693.1	1933.1	2001.8	2011.9	2016.0
75°	208.8	403.5	683.0	978.6	1240.3	1420.4	1519.5	1527.3
77.5°	112.2	144.5	223.4	333.9	419.4	465.3	470.8	473.0
80°	82.5	95.7	109.5	125.0	134.8	136.7	133.3	126.3
82.5°	58.4	66.0	71.6	77.0	81.0	77.7	64.5	49.1
85°	34.0	37.2	40.3	43.1	43.7	41.3	27.2	22.3
87.5°	13.4	14.6	14.4	16.2	15.7	14.4	10.7	9.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)