

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: P881741

Luminaire Tested: **NAV-SB1B-740-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881741
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6005 lumens
Efficiency: N/A
Efficacy: 150.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

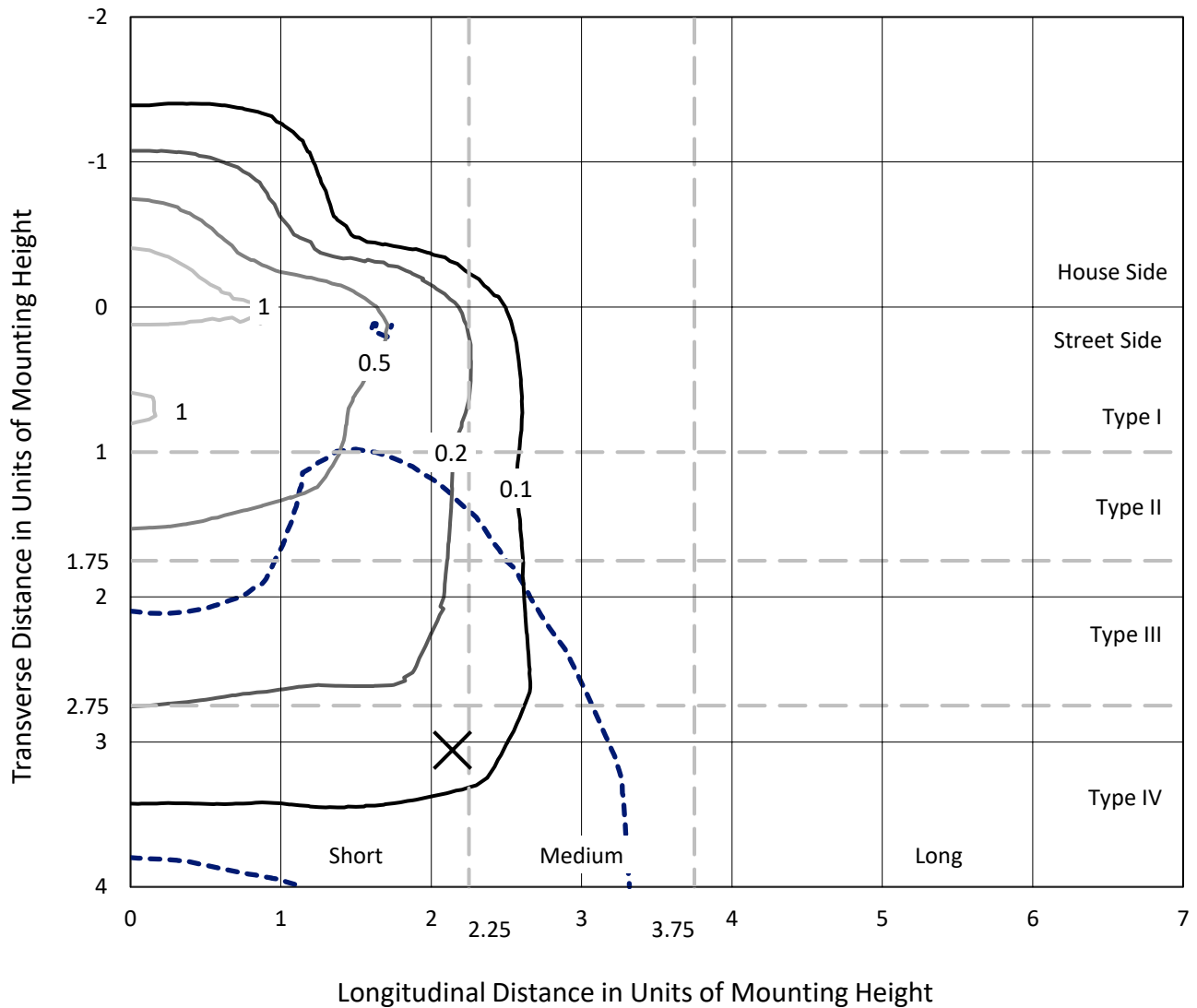
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881741
 CATALOG NUMBER: NAV-SB1B-740-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

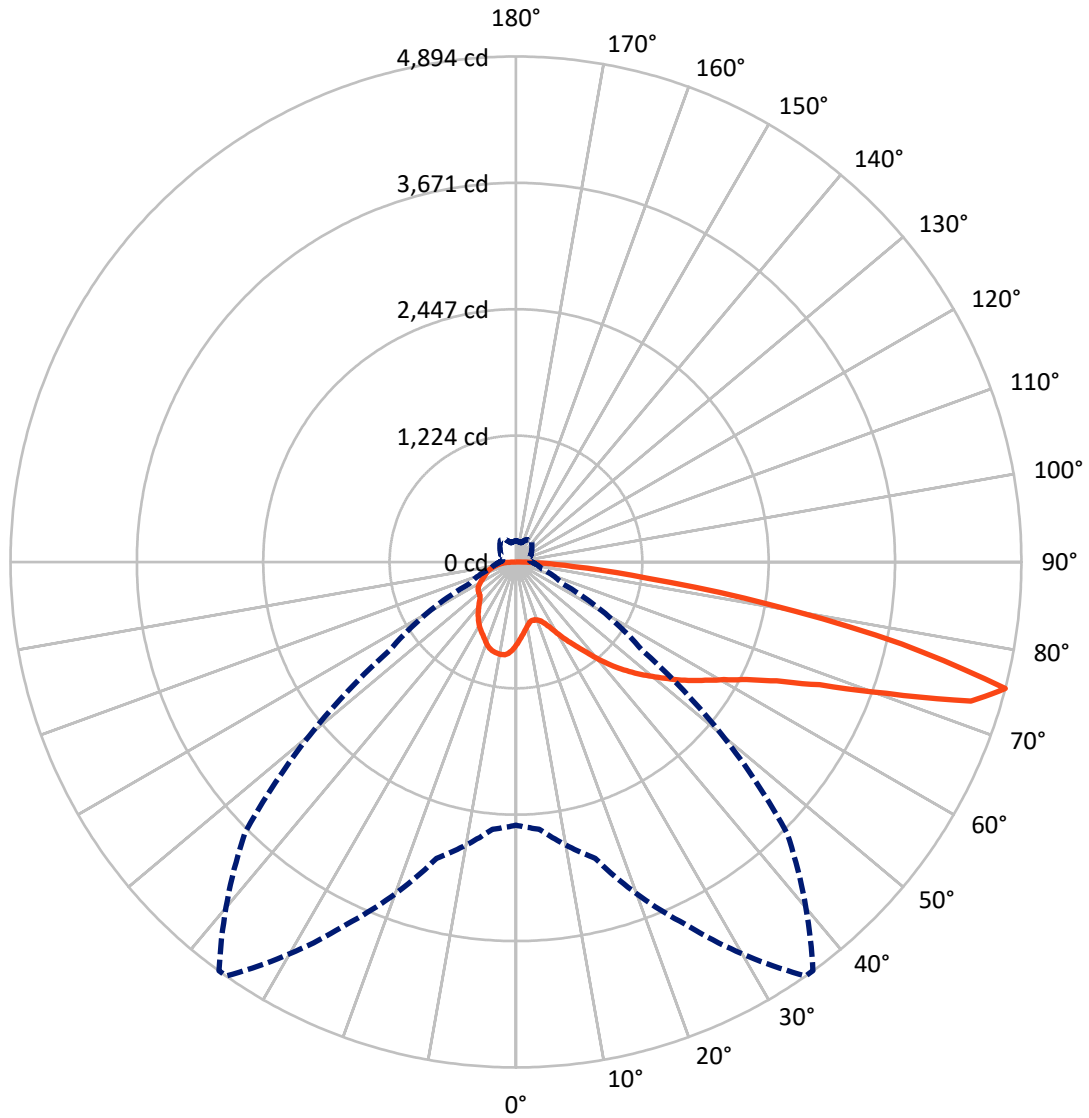
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P881741
CATALOG NUMBER: NAV-SB1B-740-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P881741
 CATALOG NUMBER: NAV-SB1B-740-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1429.0	0.0	1429.0
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	4576.0	0.0	4576.0
	% Fixture	76.2	0.0	76.2
Total	Lumens	6005.0	0.0	6005.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	1.3
10°-20°	218.5	3.6
20°-30°	367.0	6.1
30°-40°	570.3	9.5
40°-50°	846.5	14.1
50°-60°	1168.7	19.5
60°-70°	1417.9	23.6
70°-80°	1171.8	19.5
80°-90°	168.5	2.8
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°	6005.0	100.0
0°-180°	6005.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881741

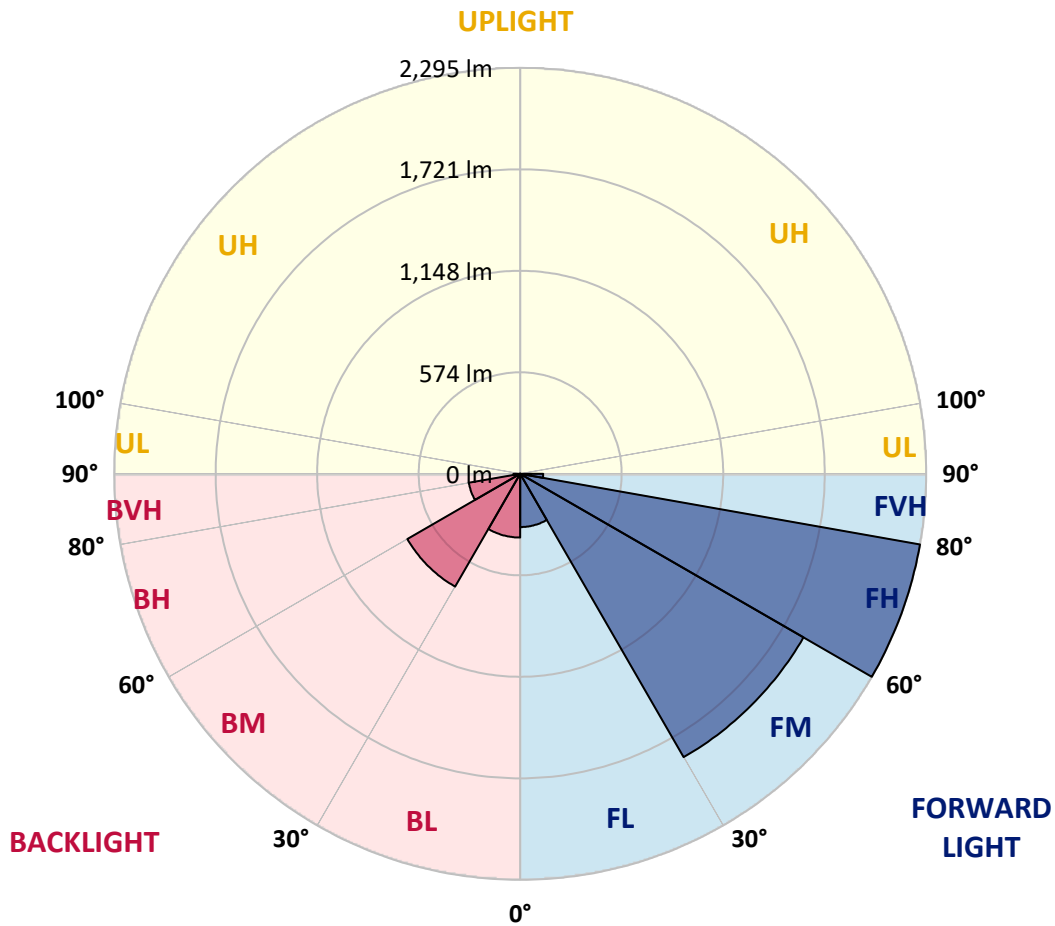
CATALOG NUMBER: NAV-SB1B-740-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	301.1	5.0			
FM (30°-60°)	1849.2	30.8			
FH (60°-80°)	2295.0	38.2			G2/5000
FVH (80°-90°)	130.6	2.2			G2/225
BL (0°-30°)	360.1	6.0	B1/500		
BM (30°-60°)	736.3	12.3	B1/1000		
BH (60°-80°)	294.6	4.9	B1/500		G1/500
BVH (80°-90°)	37.9	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



REPORT NUMBER: P881741

CATALOG NUMBER: NAV-SB1B-740-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2
2.5°	737.9	742.4	744.4	743.4	748.3	747.6	754.4	762.9	774.6	785.9	802.5
5°	681.1	685.9	690.2	694.1	703.5	706.4	717.1	733.3	754.8	776.5	803.8
7.5°	628.2	632.4	638.9	646.0	661.9	664.8	682.7	708.0	737.9	769.7	807.3
10°	585.0	589.2	596.0	604.1	623.9	627.5	650.2	684.0	722.9	763.2	811.2
12.5°	566.5	567.8	571.7	579.8	597.0	599.3	624.3	662.9	708.3	758.3	817.1
15°	565.5	568.1	568.4	572.6	586.9	587.9	610.9	649.3	699.2	757.4	825.9
17.5°	575.2	577.2	574.3	576.9	588.9	590.5	608.7	642.8	696.3	761.6	840.8
20°	601.2	602.8	594.1	590.5	599.3	600.6	618.4	647.0	699.2	770.3	861.2
22.5°	656.4	657.4	635.9	621.3	622.0	622.6	638.2	664.2	710.6	786.2	887.2
25°	742.4	741.8	707.7	679.4	663.2	659.6	670.0	692.1	729.8	807.3	920.6
27.5°	843.1	838.2	804.1	761.9	726.5	721.3	719.0	728.5	757.0	835.3	961.5
30°	956.7	952.1	915.4	860.3	811.2	802.8	781.4	776.5	797.6	873.2	1018.4
32.5°	1081.3	1078.4	1034.6	967.7	902.1	892.4	856.4	843.4	859.9	930.7	1097.6
35°	1185.9	1183.3	1146.9	1078.1	997.9	985.9	949.2	934.6	943.0	1004.4	1201.1
37.5°	1280.3	1279.0	1247.9	1193.7	1110.9	1096.3	1055.0	1050.2	1048.5	1101.5	1326.8
40°	1368.0	1364.7	1332.3	1303.7	1242.3	1229.0	1192.7	1188.5	1176.1	1220.9	1468.9
42.5°	1465.0	1456.6	1409.5	1396.2	1379.7	1368.6	1346.9	1347.5	1320.3	1355.6	1619.6
45°	1544.3	1539.4	1491.0	1483.2	1501.1	1496.5	1515.4	1520.2	1467.3	1496.9	1776.0
47.5°	1629.3	1624.8	1583.9	1578.3	1626.7	1628.0	1694.6	1696.2	1610.8	1643.6	1932.8
50°	1734.2	1727.7	1687.1	1693.9	1748.1	1753.0	1874.7	1863.7	1742.9	1792.6	2088.3
52.5°	1803.3	1807.2	1798.4	1809.5	1883.5	1888.0	2052.0	2023.7	1873.8	1939.6	2240.9
55°	1854.3	1862.1	1889.3	1914.7	2026.3	2030.9	2219.2	2176.0	1982.2	2076.0	2384.4
57.5°	1919.8	1908.8	1959.8	2009.1	2162.0	2174.0	2381.8	2322.7	2078.3	2193.5	2482.8
60°	2014.0	2006.2	2045.8	2118.8	2313.9	2333.1	2553.8	2454.8	2148.7	2286.7	2501.9
62.5°	2204.9	2185.4	2191.6	2256.2	2505.5	2530.8	2748.0	2570.1	2183.8	2323.0	2399.3
65°	2490.2	2456.8	2425.6	2470.4	2775.2	2800.2	2967.1	2660.6	2170.8	2252.6	2127.0
67.5°	2849.6	2816.5	2778.2	2820.4	3172.6	3192.4	3237.5	2711.6	2068.5	1981.2	1645.5
70°	3146.0	3133.6	3179.4	3353.1	3807.2	3807.9	3584.2	2669.4	1788.4	1404.7	952.1
72.5°	3106.7	3099.2	3340.4	3877.4	4607.1	4589.9	3912.4	2350.0	1204.7	633.7	356.8
75°	2548.7	2597.0	2970.7	3867.9	4894.4	4892.1	3711.5	1493.9	498.3	262.6	184.4
77.5°	1366.7	1443.3	1928.6	2855.7	3820.9	3878.3	2609.4	522.7	213.9	168.2	127.6
80°	445.7	512.6	768.7	1454.0	2482.8	2472.0	1118.3	205.2	146.4	119.1	88.3
82.5°	189.3	197.0	343.5	686.6	1274.2	1254.4	356.1	117.8	102.9	81.5	54.5
85°	74.0	82.8	151.6	317.5	551.9	539.9	128.6	58.4	65.9	53.2	32.5
87.5°	24.3	29.5	54.2	108.8	171.7	165.6	31.5	20.1	28.6	24.3	11.7
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: P881741

CATALOG NUMBER: NAV-SB1B-740-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2	800.2
2.5°	807.0	812.2	818.4	827.5	835.3	841.8	848.6	852.8	854.4	859.3	859.0
5°	812.9	824.2	839.5	854.4	869.0	877.8	885.6	889.5	893.1	895.6	896.3
7.5°	822.6	837.2	861.2	880.7	893.1	900.2	905.4	904.1	905.4	906.0	907.0
10°	831.0	851.5	880.1	898.6	908.0	908.3	907.0	902.5	900.2	900.5	901.2
12.5°	841.1	863.8	894.7	910.3	912.9	905.7	900.2	892.4	889.5	888.2	887.5
15°	854.7	880.7	910.6	916.4	909.9	900.8	891.4	878.8	872.3	867.1	868.7
17.5°	871.3	899.9	922.9	918.7	904.7	889.8	874.5	855.4	842.1	836.6	836.9
20°	894.3	920.0	932.3	913.8	892.7	870.0	844.0	820.7	808.3	802.8	802.2
22.5°	922.3	946.9	941.4	905.4	875.5	839.2	806.7	789.5	783.3	779.4	780.1
25°	955.7	976.8	947.9	893.1	847.3	798.3	773.3	767.7	764.8	761.9	761.9
27.5°	999.2	1010.6	952.8	874.9	803.1	754.8	745.7	746.6	745.7	740.8	741.8
30°	1056.7	1054.4	957.3	845.3	752.5	715.5	716.1	720.3	721.0	717.8	719.4
32.5°	1132.3	1109.3	959.6	807.0	704.1	681.1	681.7	686.3	689.5	684.0	686.6
35°	1223.8	1173.2	956.0	759.0	666.8	648.3	643.4	644.7	645.7	640.5	644.1
37.5°	1330.6	1244.9	940.1	705.7	635.9	616.1	605.8	597.0	591.8	586.9	590.2
40°	1447.8	1323.2	910.9	653.8	601.5	582.1	566.5	549.9	532.4	525.9	528.8
42.5°	1570.5	1403.7	875.5	604.1	561.9	546.0	529.5	505.4	479.2	465.8	467.5
45°	1697.8	1486.1	840.8	555.1	521.4	514.5	495.4	466.5	437.9	421.0	419.7
47.5°	1822.5	1564.1	789.8	505.8	483.4	490.8	475.9	449.3	417.5	390.9	387.9
50°	1941.6	1637.1	706.4	455.8	452.5	483.7	469.4	431.1	394.7	360.7	357.7
52.5°	2059.8	1696.2	599.6	410.3	436.0	481.7	461.0	418.8	374.3	338.6	334.7
55°	2160.1	1726.7	496.7	371.4	412.0	465.2	450.9	404.2	345.4	307.4	304.2
57.5°	2217.2	1702.0	411.0	333.1	378.8	437.9	433.7	373.0	311.0	281.8	277.9
60°	2192.5	1602.0	340.9	299.6	347.4	408.4	403.8	342.2	284.7	257.1	253.2
62.5°	2056.5	1411.5	285.3	270.4	318.8	378.2	374.0	318.5	264.6	238.0	233.7
65°	1782.5	1148.2	242.2	246.1	289.9	341.8	348.0	298.7	248.7	222.7	218.5
67.5°	1359.5	831.7	208.4	225.0	261.6	306.1	324.0	284.4	235.4	210.7	206.8
70°	774.9	472.3	179.8	204.5	236.7	273.0	305.5	273.0	221.1	200.6	198.0
72.5°	293.8	216.9	155.5	184.1	212.6	245.1	285.0	255.2	204.5	189.3	186.7
75°	156.8	132.1	130.8	160.0	185.0	217.8	259.4	237.6	192.2	200.0	206.5
77.5°	106.8	93.5	109.4	137.0	154.8	187.6	232.1	211.0	166.5	165.9	152.9
80°	74.0	66.2	88.9	110.4	119.8	157.8	202.6	181.1	135.7	126.6	121.1
82.5°	44.5	43.2	66.5	82.5	84.7	121.7	167.8	151.9	111.0	96.7	97.4
85°	24.3	25.6	42.5	48.4	49.3	85.1	131.5	117.5	85.4	71.7	72.4
87.5°	6.8	8.8	15.6	19.2	23.7	44.1	78.2	69.8	42.9	29.9	29.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)