

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: P881944

Luminaire Tested: **NAV-SB1C-830-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881944  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-830-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

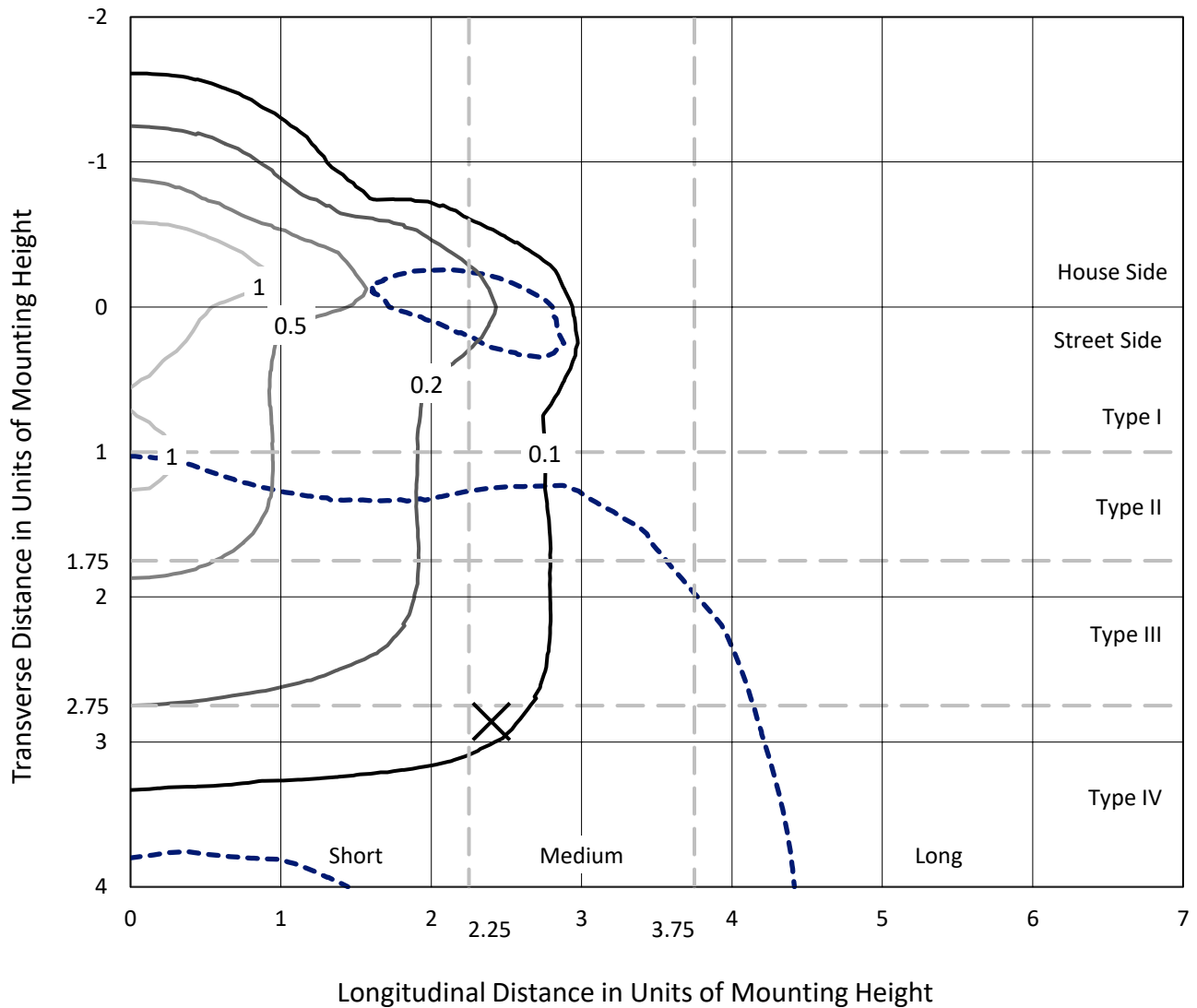
Lumens per Lamp: N/A  
Luminaire Lumens: 6501 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P881944  
 CATALOG NUMBER: NAV-SB1C-830-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

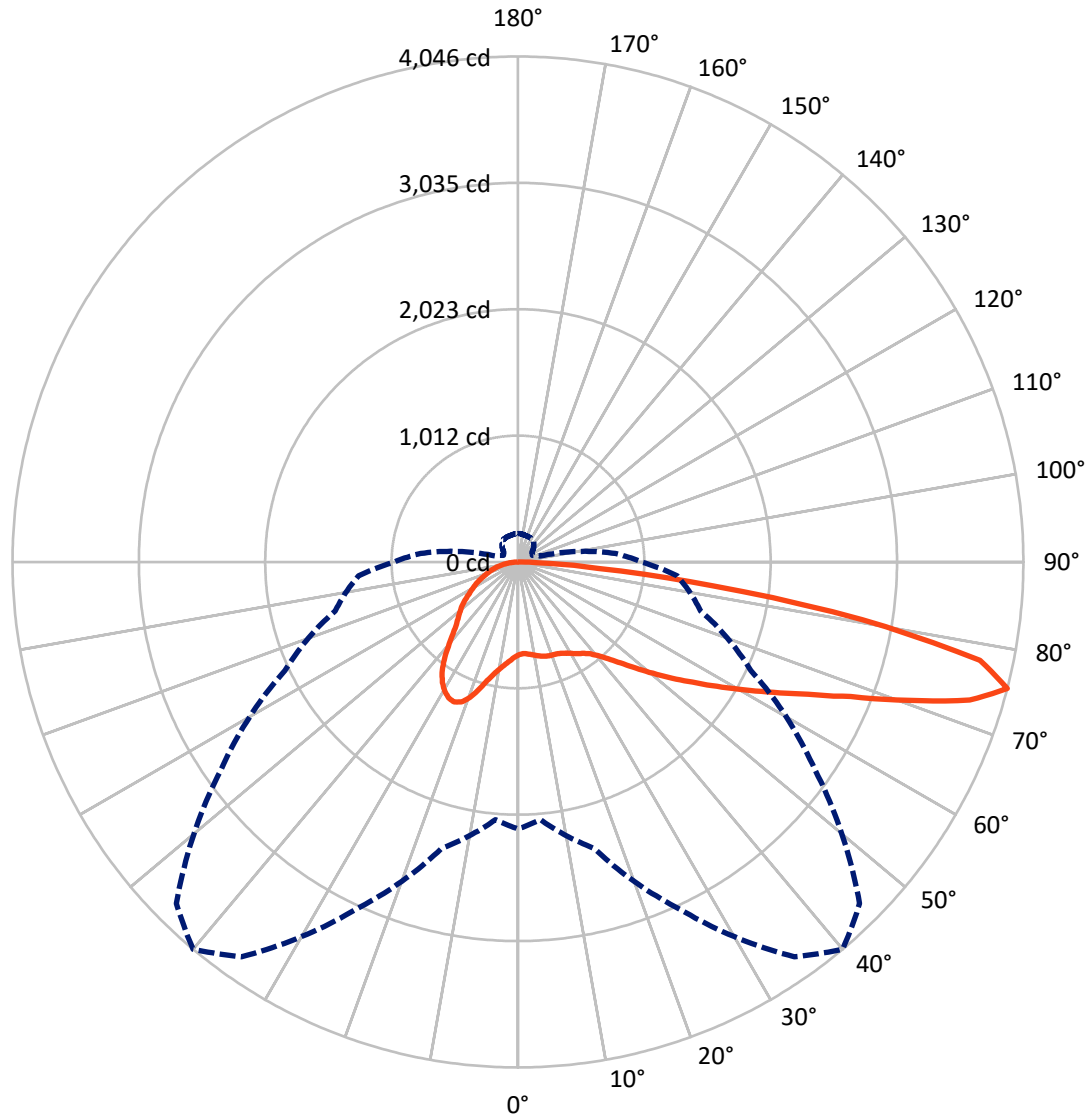
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P881944  
CATALOG NUMBER: NAV-SB1C-830-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P881944  
 CATALOG NUMBER: NAV-SB1C-830-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2014.2	0.0	2014.2
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	4486.8	0.0	4486.8
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	6501.0	0.0	6501.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.2	1.1
10°-20°	249.1	3.8
20°-30°	454.9	7.0
30°-40°	645.2	9.9
40°-50°	871.2	13.4
50°-60°	1172.0	18.0
60°-70°	1487.5	22.9
70°-80°	1350.0	20.8
80°-90°	196.8	3.0
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°	6501.0	100.0
0°-180°	6501.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P881944

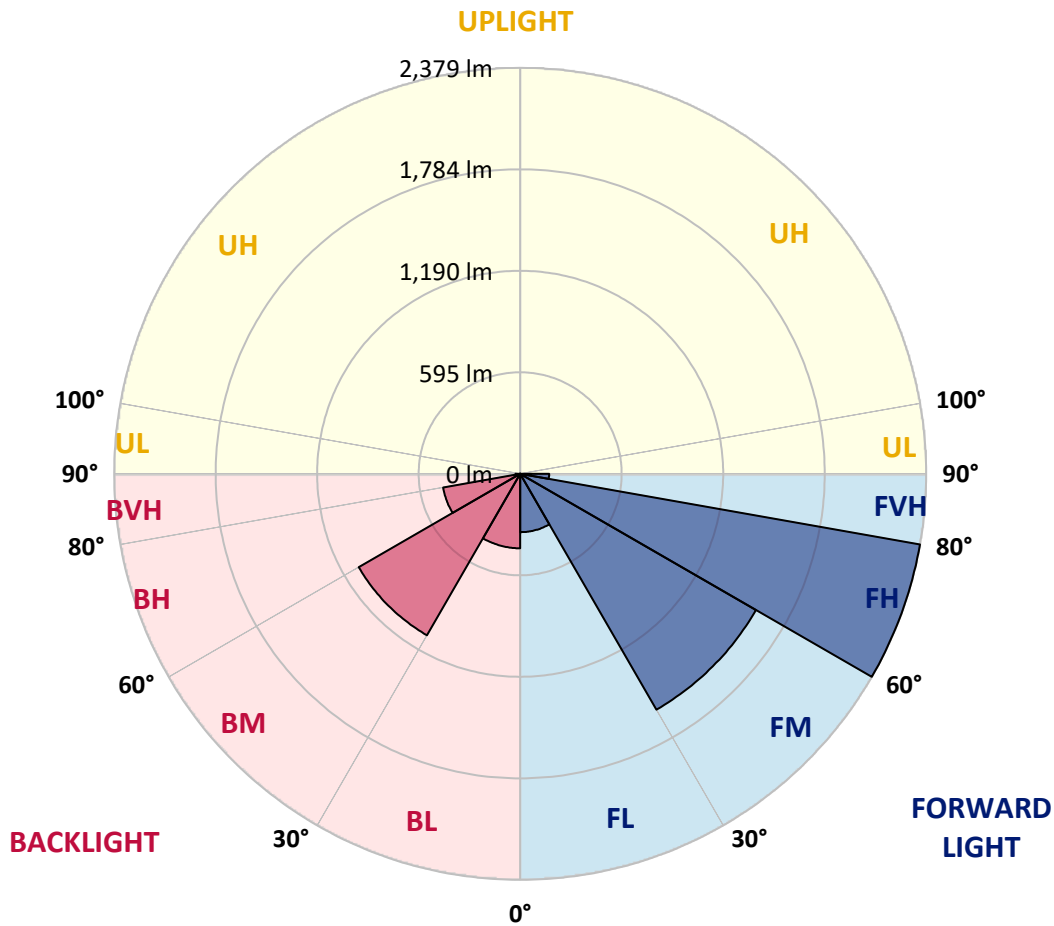
CATALOG NUMBER: NAV-SB1C-830-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	342.0	5.3			
FM (30°-60°)	1595.9	24.5			
FH (60°-80°)	2379.3	36.6			G2/5000
FVH (80°-90°)	169.7	2.6			G2/225
BL (0°-30°)	436.3	6.7	B1/500		
BM (30°-60°)	1092.5	16.8	B2/2500		
BH (60°-80°)	458.3	7.0	B1/500		G1/500
BVH (80°-90°)	27.1	0.4			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 IV Medium



REPORT NUMBER: P881944

CATALOG NUMBER: NAV-SB1C-830-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4
2.5°	732.0	736.2	735.1	733.7	733.7	734.1	733.7	736.2	738.6	741.0	744.8
5°	739.6	743.7	741.7	739.9	738.6	738.2	737.2	736.8	738.2	741.3	746.5
7.5°	754.4	758.6	755.5	752.4	749.6	748.2	746.8	744.8	743.7	745.5	752.7
10°	771.0	775.1	771.3	765.8	761.3	759.6	758.2	756.2	754.8	755.8	763.7
12.5°	787.5	791.7	786.5	778.9	773.1	772.0	770.3	769.6	769.3	768.9	776.8
15°	803.0	806.5	799.9	791.0	784.8	783.1	781.3	782.4	784.1	786.2	795.1
17.5°	815.1	818.6	808.9	797.2	791.3	790.6	789.6	793.0	797.9	803.0	814.1
20°	826.2	829.6	817.2	801.3	794.4	794.4	794.8	802.0	808.9	816.5	831.7
22.5°	841.7	844.4	829.3	807.5	797.5	798.2	801.0	808.2	816.8	827.2	848.2
25°	864.8	866.8	848.2	819.3	807.9	809.9	812.4	815.8	824.1	836.2	864.4
27.5°	902.0	903.7	879.3	839.9	822.7	826.2	829.6	827.2	831.0	841.3	877.5
30°	954.4	955.5	924.4	872.4	847.9	849.6	850.3	840.3	833.0	841.3	886.8
32.5°	1016.5	1016.1	979.2	911.7	876.5	874.8	868.9	849.3	832.4	839.6	895.1
35°	1112.7	1108.9	1061.3	966.8	908.9	898.2	884.4	859.3	835.8	837.9	902.4
37.5°	1272.0	1260.3	1194.4	1057.2	957.2	929.9	909.6	875.5	843.4	837.2	911.0
40°	1451.6	1436.8	1364.4	1181.0	1029.6	985.8	953.0	898.6	855.8	840.3	923.7
42.5°	1664.7	1643.7	1565.8	1326.8	1121.3	1057.9	1008.6	927.9	874.1	850.3	941.0
45°	1926.4	1898.5	1788.2	1491.3	1236.8	1152.3	1086.5	972.3	902.0	869.6	966.8
47.5°	2190.9	2197.8	2040.9	1679.5	1375.4	1268.9	1184.1	1039.2	942.7	900.6	1008.6
50°	2471.9	2476.7	2292.3	1888.1	1532.7	1400.6	1293.7	1114.1	999.2	944.8	1071.0
52.5°	2691.2	2691.9	2520.5	2106.4	1696.4	1545.4	1412.0	1199.6	1064.8	1003.4	1154.1
55°	2828.4	2826.7	2680.5	2312.9	1884.7	1697.5	1543.0	1296.8	1144.8	1072.3	1258.5
57.5°	2928.1	2922.9	2790.8	2490.5	2085.4	1877.1	1691.3	1407.1	1239.2	1154.4	1396.1
60°	2966.0	2962.9	2865.7	2644.0	2296.4	2075.7	1862.3	1530.6	1346.5	1251.3	1573.0
62.5°	2980.5	2986.3	2939.1	2792.6	2522.2	2295.7	2050.2	1678.2	1467.1	1360.9	1759.5
65°	3031.5	3042.2	3032.6	2987.0	2777.4	2553.3	2299.5	1853.7	1598.9	1478.5	1954.4
67.5°	3132.5	3143.2	3147.4	3219.8	3089.1	2874.3	2610.5	2072.3	1753.0	1600.6	2100.9
70°	3130.1	3127.0	3200.1	3404.9	3479.4	3318.7	3029.8	2341.2	1936.8	1702.0	2119.5
72.5°	2849.1	2824.3	2997.0	3402.9	3804.2	3782.8	3541.8	2688.1	2095.4	1714.4	1839.2
75°	2137.4	2071.2	2376.4	3066.7	3858.4	4046.3	3867.3	2903.3	2057.8	1514.7	1279.9
77.5°	914.1	847.5	1207.2	2270.2	3453.2	3782.5	3568.7	2532.9	1642.6	1001.7	628.6
80°	239.3	238.9	364.8	1029.2	2348.5	2793.3	2450.5	1635.8	938.6	357.9	173.4
82.5°	99.0	96.5	134.1	400.3	1147.5	1567.5	1279.2	729.6	338.9	96.9	57.6
85°	36.9	36.5	65.2	138.3	404.8	646.5	467.9	186.5	84.5	47.2	25.9
87.5°	10.3	10.0	14.1	47.9	98.6	149.6	80.0	30.7	23.8	18.6	7.6
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: P881944  
 CATALOG NUMBER: NAV-SB1C-830-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4	743.4
2.5°	745.8	747.5	750.6	753.1	756.2	759.6	764.4	767.5	770.6	772.7	771.3
5°	748.9	752.7	760.6	768.6	777.9	786.5	796.5	803.7	809.6	811.3	812.0
7.5°	755.8	762.0	775.5	788.9	803.7	817.9	832.4	844.8	854.8	858.6	858.9
10°	767.9	776.2	795.1	814.1	833.7	855.5	874.1	892.0	906.1	912.0	912.4
12.5°	783.1	793.4	818.2	844.4	871.7	901.7	925.8	947.9	965.5	973.4	973.4
15°	802.7	816.2	847.9	883.0	923.0	964.8	995.4	1019.9	1039.6	1049.2	1048.5
17.5°	824.1	842.0	882.0	935.1	992.3	1047.2	1083.0	1101.0	1121.3	1130.6	1130.3
20°	844.8	866.8	924.1	1001.3	1077.5	1135.8	1164.7	1169.6	1171.0	1172.0	1174.7
22.5°	866.1	895.8	976.8	1084.8	1166.5	1206.8	1211.0	1190.3	1161.3	1147.9	1151.6
25°	889.6	928.9	1045.8	1176.8	1243.0	1247.8	1216.1	1165.8	1111.0	1085.8	1089.6
27.5°	912.4	967.2	1128.5	1264.7	1298.2	1255.8	1187.5	1116.1	1049.9	1023.4	1026.5
30°	935.1	1011.0	1219.9	1341.6	1323.4	1236.1	1142.3	1062.7	996.1	968.2	971.3
32.5°	958.2	1062.0	1325.1	1397.1	1318.9	1194.4	1086.1	1002.7	944.1	914.8	918.6
35°	984.4	1124.8	1424.7	1427.5	1288.9	1133.0	1012.0	931.0	879.9	856.5	861.7
37.5°	1018.6	1204.4	1512.7	1435.1	1236.5	1043.0	919.9	846.1	804.1	793.4	801.0
40°	1061.0	1300.3	1579.9	1423.0	1158.9	933.7	819.3	760.3	736.5	738.9	747.2
42.5°	1116.1	1407.5	1627.1	1392.0	1051.0	821.0	731.0	704.8	716.2	725.8	734.8
45°	1187.9	1518.9	1656.4	1339.2	928.9	725.5	678.9	685.1	693.7	694.8	701.7
47.5°	1279.6	1631.6	1675.7	1259.6	804.4	658.2	645.8	647.2	645.5	638.2	643.7
50°	1394.0	1741.3	1693.0	1154.1	698.6	616.2	599.6	594.8	571.0	547.5	550.7
52.5°	1524.4	1841.9	1700.2	1023.0	616.2	581.0	554.1	523.8	479.3	472.0	474.5
55°	1669.2	1935.0	1681.6	862.0	546.9	535.8	495.1	458.6	453.8	447.6	448.6
57.5°	1842.3	2035.4	1643.7	682.4	475.8	483.1	443.4	447.6	438.9	429.3	427.6
60°	2031.6	2139.2	1577.1	518.6	402.4	417.2	430.0	429.6	427.2	419.3	416.5
62.5°	2201.9	2207.4	1446.1	397.2	337.9	366.2	401.0	400.7	398.6	394.1	392.4
65°	2303.3	2197.1	1227.5	312.7	284.8	324.1	361.7	364.5	364.8	364.5	364.5
67.5°	2285.4	2076.1	927.5	248.9	241.0	281.4	322.7	326.5	329.3	330.0	330.7
70°	2082.6	1810.2	604.8	198.6	202.1	243.8	285.8	289.6	292.0	294.8	296.2
72.5°	1623.3	1330.9	346.2	160.7	167.9	211.4	249.3	253.8	255.2	260.3	262.4
75°	989.2	782.7	186.9	126.5	137.9	180.7	213.1	218.3	220.7	226.9	227.6
77.5°	470.3	338.9	106.5	98.6	111.0	147.6	180.0	185.8	179.3	182.7	180.0
80°	159.0	125.9	67.2	75.2	84.8	115.2	144.1	150.0	136.2	135.5	134.1
82.5°	55.5	51.0	42.8	50.0	54.8	82.4	109.0	116.5	101.4	101.0	96.2
85°	21.7	20.7	23.8	27.2	32.8	50.7	71.7	75.5	62.4	50.3	49.7
87.5°	4.5	4.8	5.9	6.2	10.0	17.6	25.9	31.7	25.2	21.4	19.7
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)