

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: P881766

Luminaire Tested: **NAV-SB1B-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881766
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3344 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

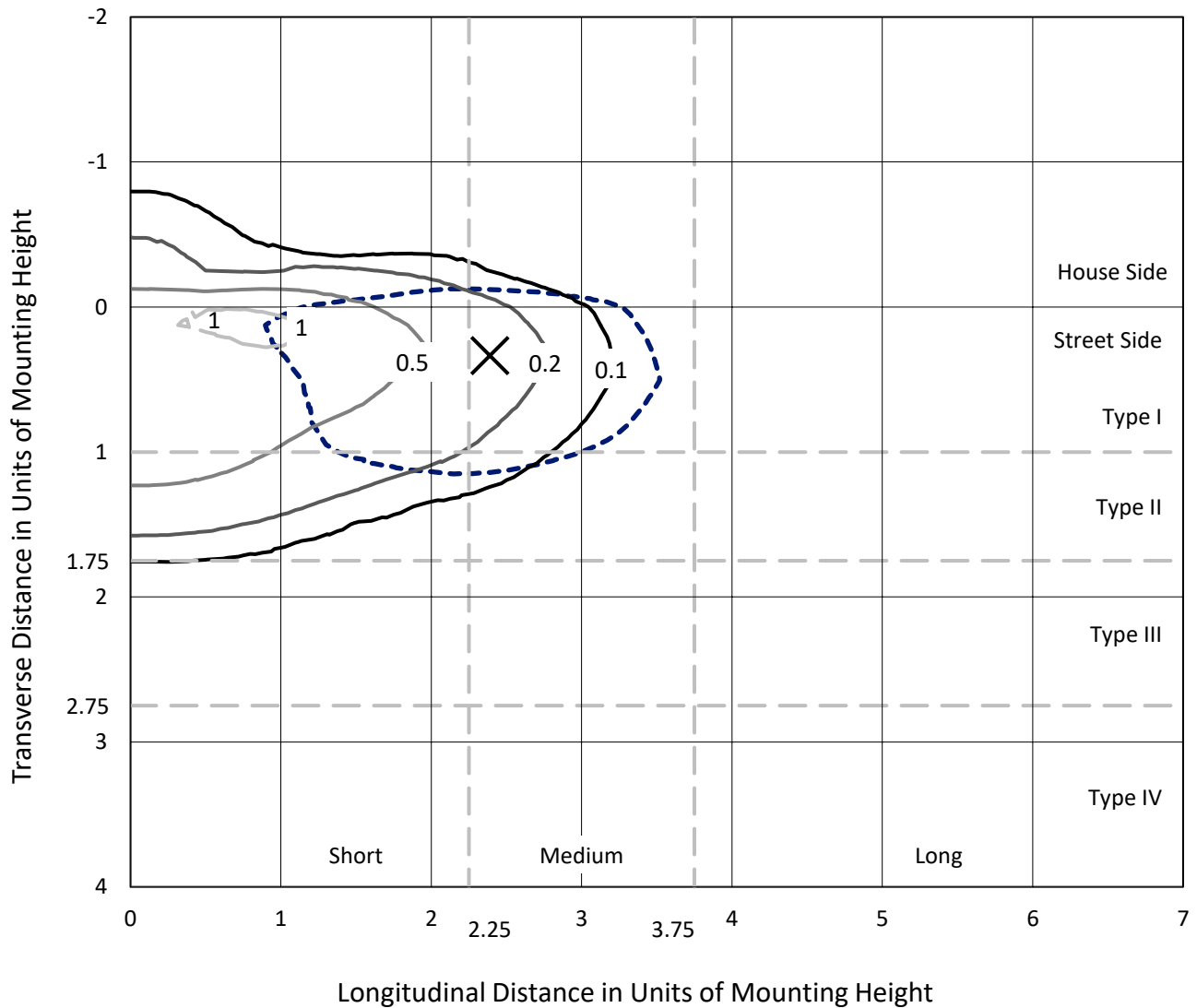
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881766
 CATALOG NUMBER: NAV-SB1B-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

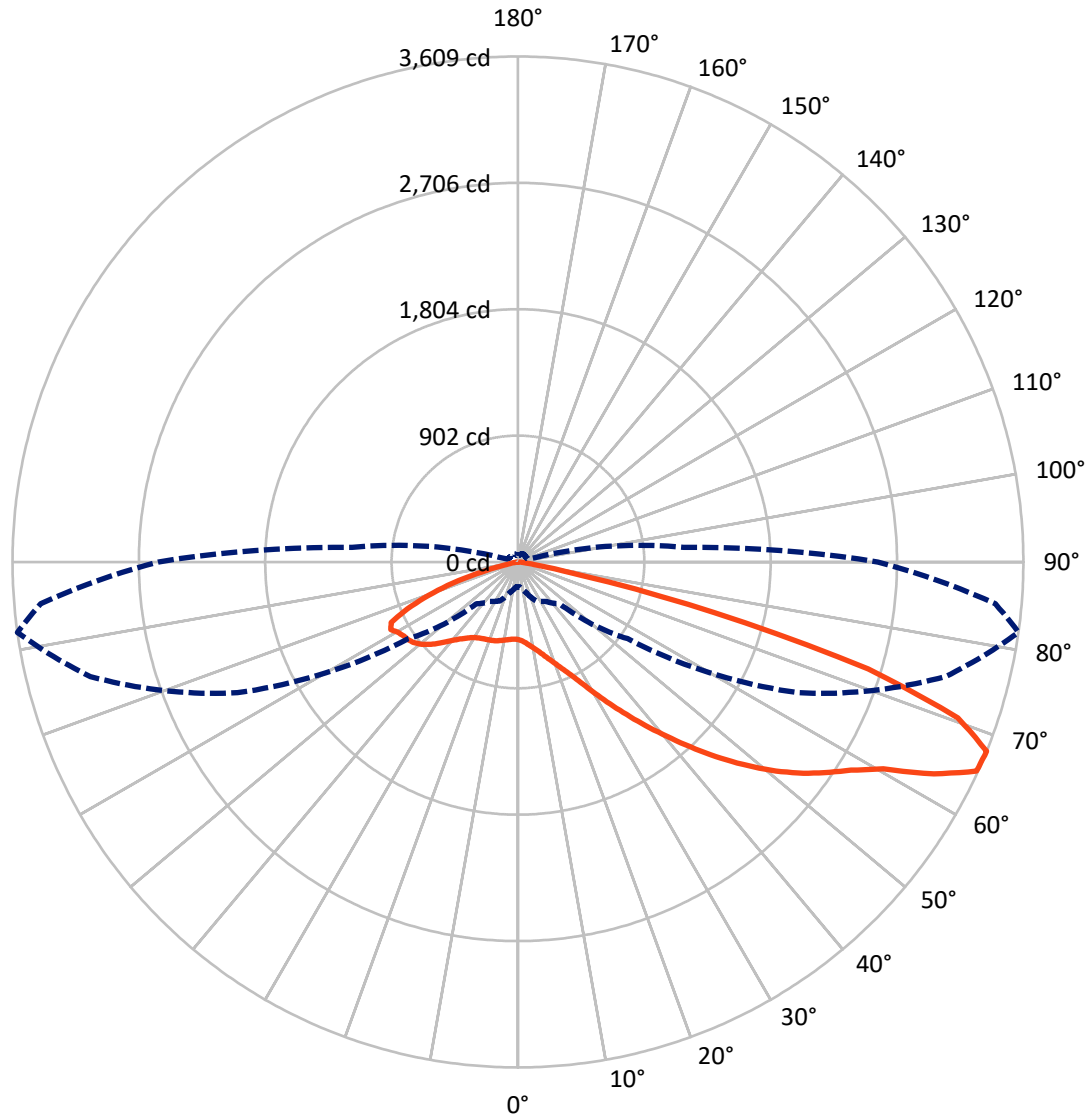
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type II - Medium - N/A

REPORT NUMBER: P881766
CATALOG NUMBER: NAV-SB1B-827-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P881766

CATALOG NUMBER: NAV-SB1B-827-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	605.7	0.0	605.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	2738.3	0.0	2738.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	3344.0	0.0	3344.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.5
10°-20°	128.3	3.8
20°-30°	205.4	6.1
30°-40°	363.3	10.9
40°-50°	636.5	19.0
50°-60°	848.9	25.4
60°-70°	790.2	23.6
70°-80°	303.3	9.1
80°-90°	18.8	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°	3344.0	100.0
0°-180°	3344.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881766

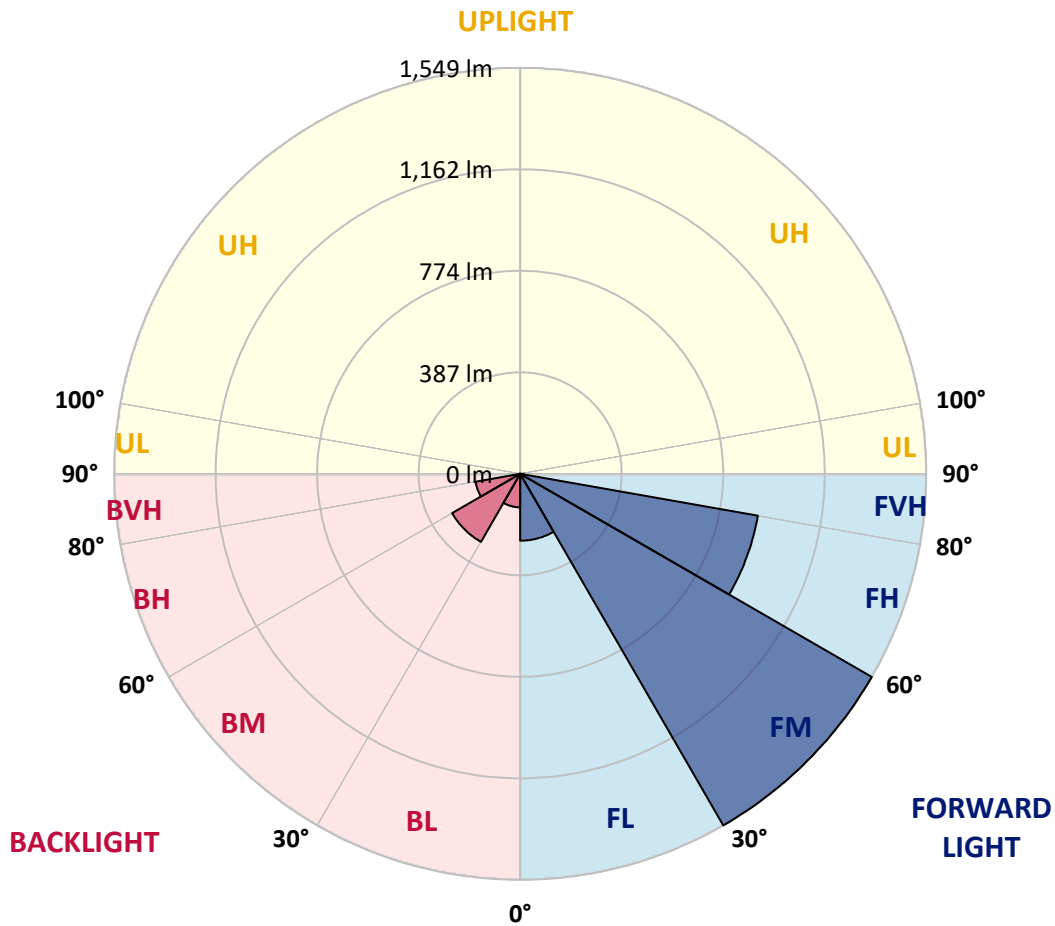
CATALOG NUMBER: NAV-SB1B-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	255.1	7.6			
FM (30°-60°)	1548.8	46.3			
FH (60°-80°)	920.7	27.5			G1/1800
FVH (80°-90°)	13.7	0.4			G1/100
BL (0°-30°)	127.9	3.8	B1/500		
BM (30°-60°)	299.8	9.0	B1/1000		
BH (60°-80°)	172.9	5.2	B1/500		G1/500
BVH (80°-90°)	5.1	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



REPORT NUMBER: P881766

CATALOG NUMBER: NAV-SB1B-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0
2.5°	585.5	588.9	587.0	586.0	584.3	581.9	580.0	574.0	567.7	563.6	562.2
5°	597.3	600.7	600.5	601.4	602.6	603.3	602.9	596.1	587.2	580.2	576.1
7.5°	587.2	591.1	594.2	599.0	607.4	616.3	620.7	619.2	610.1	600.5	595.4
10°	558.6	562.7	570.1	581.4	599.3	618.5	634.6	642.1	636.3	625.7	618.8
12.5°	506.1	510.2	524.9	549.4	579.3	612.7	643.6	663.5	665.0	654.4	646.2
15°	447.1	451.2	466.8	497.6	543.2	596.8	648.4	686.2	698.9	689.8	679.9
17.5°	410.5	414.1	425.9	450.7	498.1	565.1	646.7	710.2	739.4	732.1	720.4
20°	399.4	402.5	408.1	425.4	464.9	532.1	635.6	732.9	782.9	778.9	765.6
22.5°	411.2	414.1	415.8	423.5	448.3	510.4	621.6	756.0	833.5	834.0	817.9
25°	438.4	441.3	439.4	444.2	455.0	503.7	616.3	783.2	897.1	902.4	884.1
27.5°	483.2	483.4	478.9	478.6	480.3	513.8	621.9	812.3	977.2	987.1	964.5
30°	573.0	569.4	551.8	532.8	524.1	544.1	637.3	846.8	1071.9	1089.4	1061.0
32.5°	711.4	706.1	673.9	628.4	582.6	593.0	665.0	886.0	1174.9	1206.7	1172.0
35°	861.7	860.2	826.5	758.9	678.9	662.6	710.0	937.5	1287.3	1337.9	1296.7
37.5°	1001.3	1000.6	981.3	901.6	804.4	759.6	782.2	1004.9	1407.7	1480.9	1432.3
40°	1128.9	1131.1	1111.8	1040.6	942.6	884.1	880.5	1088.2	1541.6	1636.7	1578.9
42.5°	1239.2	1241.6	1222.1	1169.4	1079.1	1021.8	1001.1	1190.3	1672.3	1804.0	1735.6
45°	1314.1	1329.0	1326.1	1284.0	1219.2	1159.7	1146.0	1318.4	1821.3	1981.5	1901.3
47.5°	1335.3	1349.0	1370.6	1376.4	1336.9	1278.4	1294.8	1472.7	1972.1	2159.1	2067.9
50°	1283.0	1295.8	1340.8	1400.7	1428.2	1410.1	1439.5	1638.1	2126.4	2336.3	2231.4
52.5°	1180.0	1193.0	1249.8	1344.6	1456.6	1513.4	1584.7	1801.1	2275.9	2504.1	2386.2
55°	1030.9	1044.7	1117.6	1225.0	1402.4	1556.0	1705.8	1963.9	2412.9	2655.1	2525.8
57.5°	828.2	838.3	914.2	1064.4	1266.2	1513.7	1795.1	2141.6	2541.9	2803.4	2664.2
60°	539.8	548.7	636.8	804.4	1040.3	1372.1	1812.9	2339.7	2713.4	2996.3	2850.8
62.5°	359.0	365.0	417.2	540.3	732.6	1100.3	1708.7	2497.9	2964.7	3331.9	3170.8
65°	246.3	252.3	304.6	390.3	473.3	727.8	1408.9	2476.9	3192.5	3598.4	3408.0
67.5°	175.8	180.8	225.1	306.0	342.6	422.8	955.1	2209.2	3159.7	3608.5	3420.7
70°	125.9	128.8	165.4	238.4	272.3	254.0	531.1	1689.7	2766.6	3332.1	3160.2
72.5°	88.1	89.1	114.8	181.5	219.3	185.4	252.8	1126.5	2092.4	2615.4	2450.0
75°	59.7	60.9	77.3	133.1	176.0	141.6	133.9	604.1	1228.4	1447.7	1297.7
77.5°	36.6	37.1	49.8	91.0	131.7	107.9	86.2	255.9	475.3	466.6	397.7
80°	20.7	20.7	31.8	56.6	89.8	69.6	60.4	108.8	150.5	132.2	116.5
82.5°	11.6	11.8	23.1	35.2	59.5	41.2	33.2	50.3	65.0	57.5	50.1
85°	4.8	5.3	14.2	16.6	28.4	20.5	13.5	21.2	24.1	21.4	15.6
87.5°	0.5	0.7	4.3	3.1	3.4	4.1	1.9	4.1	3.4	3.4	2.4
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: P881766

CATALOG NUMBER: NAV-SB1B-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0	554.0
2.5°	557.6	554.0	544.8	534.2	520.3	513.5	504.4	498.1	492.8	493.3	488.5
5°	568.4	559.3	538.8	513.3	481.5	458.9	434.8	418.2	404.7	401.8	395.3
7.5°	583.4	568.9	533.0	487.1	433.4	392.7	356.3	333.0	316.4	311.1	305.8
10°	602.6	581.7	525.6	454.1	376.8	325.0	286.0	267.7	256.4	252.6	249.7
12.5°	625.0	596.4	515.7	413.9	318.5	268.7	243.9	234.7	231.1	229.9	229.2
15°	653.2	614.7	500.8	366.2	269.2	234.3	223.7	222.5	222.9	222.5	222.2
17.5°	686.6	634.6	476.5	317.1	235.9	216.7	212.8	213.8	215.0	214.8	214.3
20°	723.2	654.4	445.4	273.5	213.3	204.2	202.0	203.0	203.9	203.4	203.2
22.5°	764.9	675.6	411.0	239.6	198.1	192.6	190.2	190.4	190.4	189.5	189.0
25°	814.7	698.9	374.9	215.5	186.6	182.3	179.4	178.4	177.0	174.1	173.6
27.5°	874.2	723.7	340.2	198.6	177.4	173.3	170.0	167.6	164.0	159.1	158.7
30°	941.1	753.8	310.8	188.0	170.2	166.1	162.3	158.7	153.4	147.3	146.9
32.5°	1019.9	786.1	289.4	181.1	163.7	159.4	154.8	150.5	144.7	138.7	138.9
35°	1113.8	825.1	276.9	176.2	158.7	152.9	147.8	143.0	138.7	133.4	132.9
37.5°	1215.6	866.5	273.0	173.8	155.3	146.4	140.6	137.2	136.8	133.6	133.4
40°	1327.1	915.6	275.9	172.4	151.7	140.1	133.9	133.1	134.3	128.8	129.0
42.5°	1445.0	973.9	280.7	170.7	146.6	133.9	127.8	127.8	126.9	119.2	119.2
45°	1572.6	1041.0	285.5	166.6	140.6	127.6	123.0	121.3	117.2	109.8	109.5
47.5°	1701.2	1109.4	289.2	159.1	133.4	122.3	118.2	114.4	108.3	101.6	101.4
50°	1823.3	1170.8	285.3	148.1	125.2	117.2	112.9	107.6	101.1	96.5	95.8
52.5°	1932.3	1224.0	268.9	135.1	116.5	112.0	108.1	102.6	97.3	92.5	92.0
55°	2027.2	1267.1	240.0	122.8	108.8	107.4	103.5	96.5	89.3	85.2	84.7
57.5°	2118.2	1299.9	203.9	112.7	101.8	102.3	96.5	90.3	83.5	79.2	78.7
60°	2239.3	1343.7	167.3	103.3	94.4	95.8	89.6	85.0	76.6	71.0	70.3
62.5°	2432.9	1411.8	132.9	91.7	85.7	86.2	83.5	78.0	67.9	61.4	60.9
65°	2586.5	1386.8	104.7	79.2	75.8	76.6	76.6	70.5	59.7	52.2	51.5
67.5°	2569.1	1187.4	83.5	66.9	66.4	66.9	68.6	63.6	53.0	46.9	46.0
70°	2366.7	944.5	66.9	55.6	57.8	56.6	61.4	58.0	47.7	41.7	40.9
72.5°	1931.1	680.4	51.0	46.0	44.3	46.2	55.4	52.2	39.7	33.0	32.3
75°	1128.4	363.1	38.0	36.4	32.0	38.5	49.1	44.5	30.3	24.3	23.6
77.5°	367.4	126.6	27.9	26.7	23.8	31.1	41.9	37.6	24.8	19.3	18.5
80°	98.5	38.3	19.0	17.6	15.4	23.1	33.2	29.9	17.8	12.5	12.3
82.5°	39.5	16.1	11.1	9.9	8.4	15.9	26.2	24.1	13.2	7.9	7.9
85°	12.8	5.3	4.1	3.1	3.9	9.9	15.6	16.4	9.4	4.1	3.1
87.5°	1.7	0.7	0.7	1.0	0.7	1.7	4.8	4.6	2.6	0.5	0.0
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)