

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: P881558

Luminaire Tested: **NAV-SB1A-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881558
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3521 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

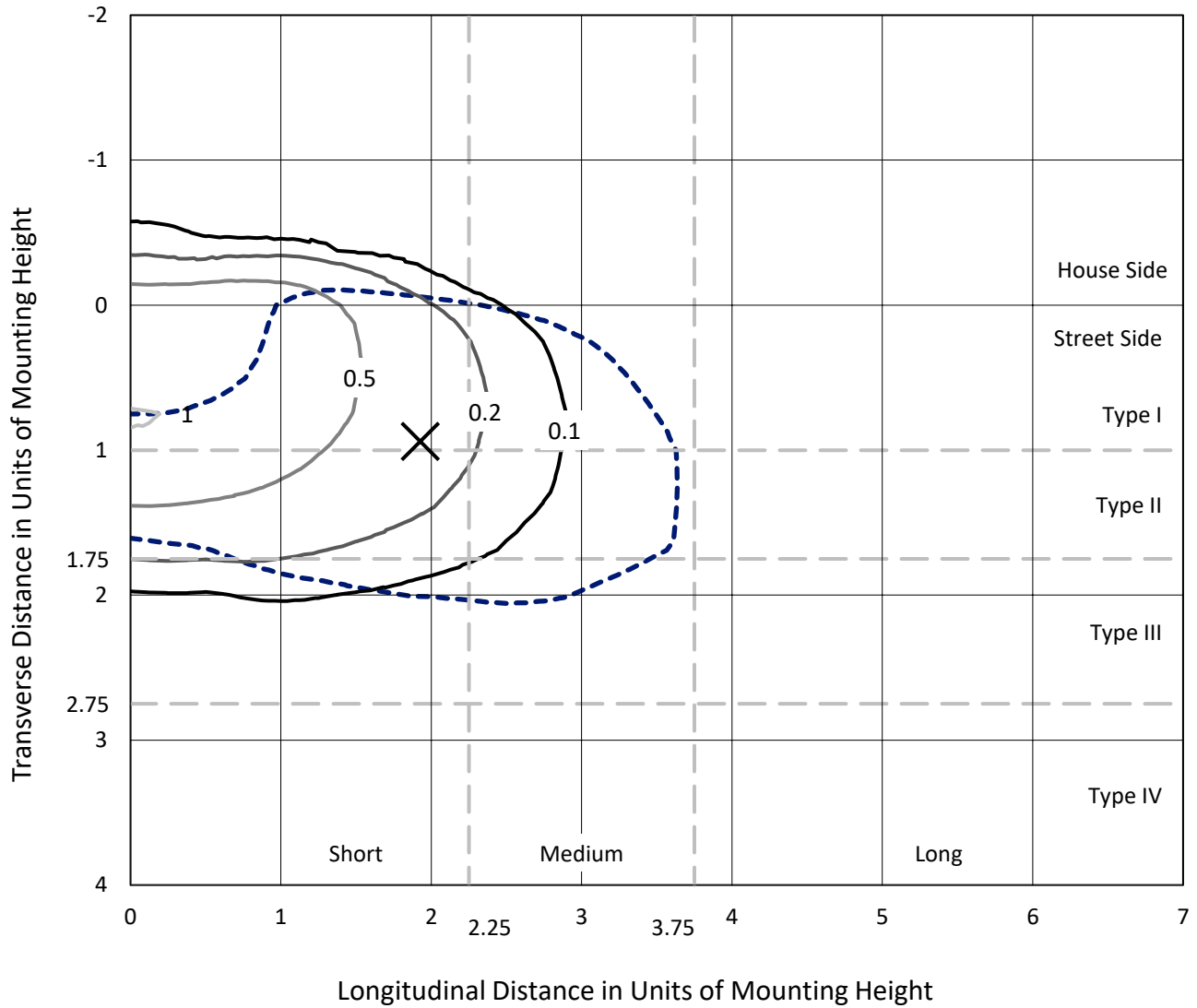
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881558
 CATALOG NUMBER: NAV-SB1A-735-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

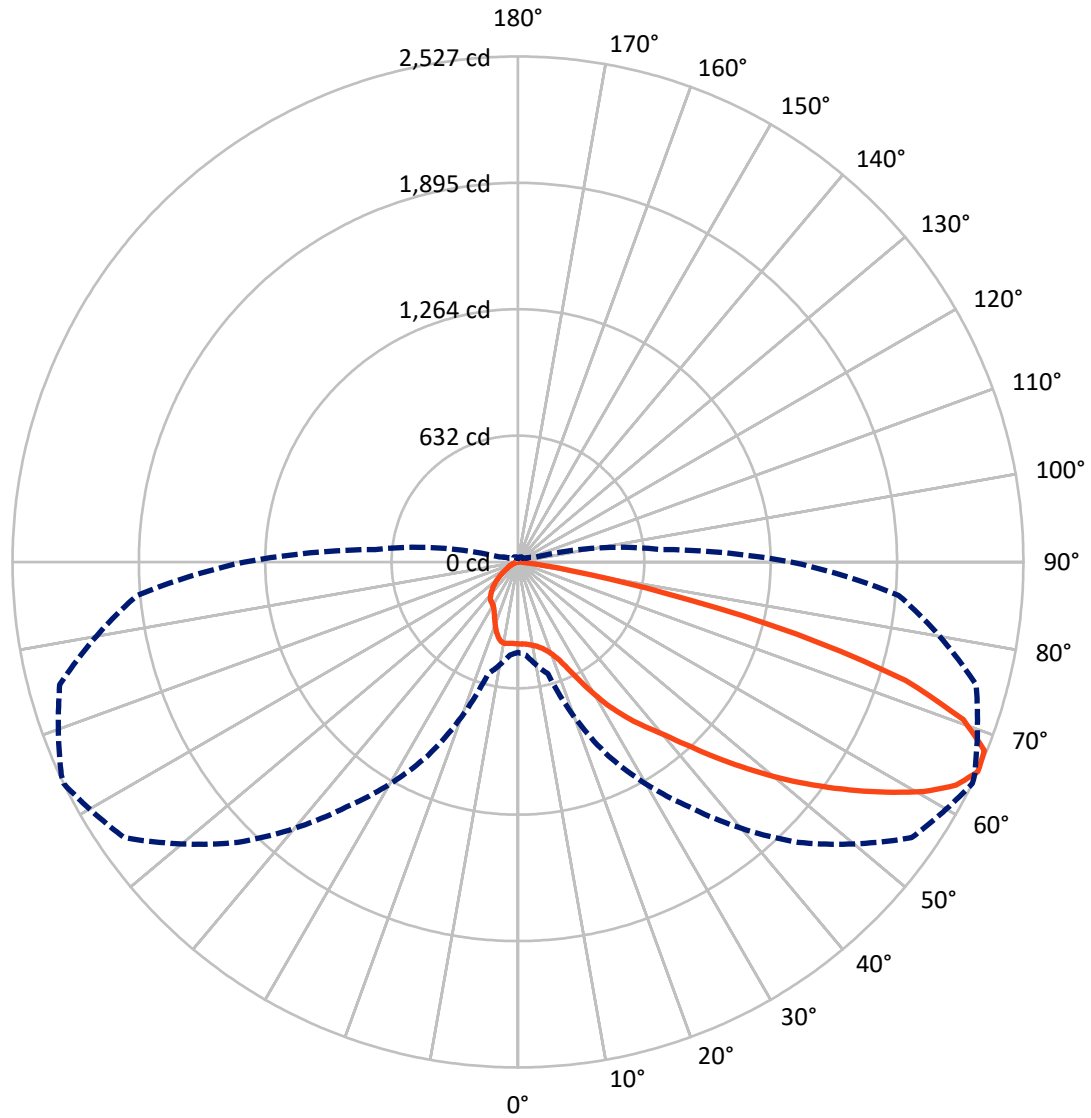
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type III - Short - N/A

REPORT NUMBER: P881558
CATALOG NUMBER: NAV-SB1A-735-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P881558

CATALOG NUMBER: NAV-SB1A-735-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	470.9	0.0	470.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	3050.1	0.0	3050.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	3521.0	0.0	3521.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.8	1.1
10°-20°	102.5	2.9
20°-30°	194.2	5.5
30°-40°	392.9	11.2
40°-50°	669.4	19.0
50°-60°	910.3	25.9
60°-70°	854.8	24.3
70°-80°	342.5	9.7
80°-90°	16.6	0.5
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°	3521.0	100.0
0°-180°	3521.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881558

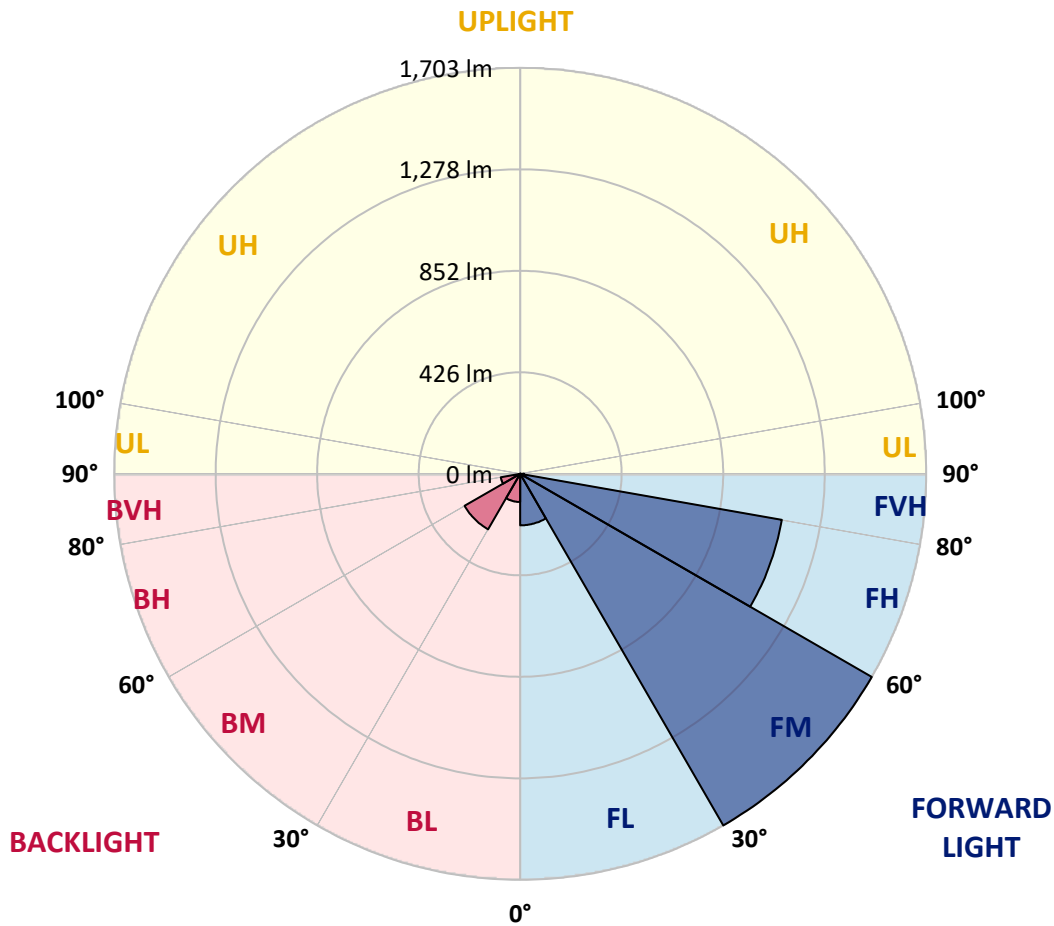
CATALOG NUMBER: NAV-SB1A-735-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	216.2	6.1			
FM (30°-60°)	1703.5	48.4			
FH (60°-80°)	1114.7	31.7			G1/1800
FVH (80°-90°)	15.8	0.4			G1/100
BL (0°-30°)	118.2	3.4	B1/500		
BM (30°-60°)	269.2	7.6	B1/1000		
BH (60°-80°)	82.6	2.3	B0/110		G0/110
BVH (80°-90°)	0.8	0.0			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 III Short



REPORT NUMBER: P881558
 CATALOG NUMBER: NAV-SB1A-735-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5
2.5°	408.1	410.9	410.2	409.5	409.3	409.8	410.0	409.8	409.8	409.8	410.0
5°	400.3	402.7	402.7	404.3	406.7	409.5	411.7	412.1	412.6	413.3	413.1
7.5°	385.5	387.3	388.8	394.2	400.1	407.6	414.0	417.3	417.8	420.4	421.3
10°	375.3	377.7	380.0	385.7	394.2	405.5	416.4	424.4	425.6	431.7	434.5
12.5°	374.8	377.2	380.3	386.4	396.3	408.3	421.6	433.1	435.3	444.2	450.1
15°	379.8	382.6	385.5	393.0	403.6	418.3	432.4	446.8	448.9	461.7	468.1
17.5°	389.9	393.7	395.8	403.4	414.7	431.0	449.7	466.2	468.1	482.9	491.0
20°	410.0	414.5	415.2	421.3	432.4	449.9	472.1	492.6	495.0	512.0	520.9
22.5°	451.5	457.9	452.3	455.3	465.2	482.7	506.8	532.7	536.0	555.4	563.4
25°	524.7	533.7	519.1	513.9	518.1	536.3	566.5	599.3	603.1	618.7	622.7
27.5°	668.5	656.9	634.7	613.0	600.2	610.6	644.6	685.2	689.9	705.1	700.3
30°	826.4	816.2	786.2	738.1	707.9	706.2	737.6	782.9	788.4	802.8	788.4
32.5°	984.5	974.8	942.3	883.0	830.6	804.7	826.4	876.7	879.5	888.7	867.4
35°	1140.1	1130.2	1097.6	1036.9	972.5	913.5	909.2	965.9	966.8	976.5	944.9
37.5°	1296.6	1288.3	1253.6	1194.1	1130.6	1049.2	1009.8	1050.4	1051.6	1061.0	1028.2
40°	1408.2	1411.8	1387.9	1341.9	1287.4	1198.4	1122.6	1140.3	1133.2	1149.0	1129.4
42.5°	1504.0	1511.1	1490.4	1467.2	1435.6	1357.2	1262.3	1259.3	1247.9	1256.4	1236.1
45°	1586.9	1592.8	1574.1	1568.7	1568.0	1513.0	1415.1	1396.6	1380.8	1379.2	1354.9
47.5°	1617.3	1628.7	1636.7	1654.9	1690.3	1667.1	1573.0	1544.4	1526.7	1513.7	1475.2
50°	1628.9	1640.9	1668.3	1721.2	1805.0	1814.9	1730.2	1698.1	1676.4	1652.7	1596.1
52.5°	1613.3	1634.8	1671.6	1760.6	1882.2	1933.4	1881.0	1852.9	1828.1	1789.7	1705.6
55°	1521.5	1543.0	1618.3	1760.1	1920.7	2016.5	2023.6	2011.1	1983.2	1922.5	1794.1
57.5°	1328.0	1359.8	1479.0	1700.2	1919.9	2088.0	2163.3	2172.3	2141.1	2054.3	1863.8
60°	1059.8	1103.0	1248.4	1567.3	1860.7	2126.7	2285.8	2330.7	2297.6	2184.1	1920.2
62.5°	739.5	789.6	927.2	1359.1	1725.2	2098.9	2375.3	2458.1	2433.1	2300.2	1941.9
65°	451.1	467.1	578.1	1069.5	1494.8	1982.3	2402.9	2527.0	2518.8	2371.3	1909.8
67.5°	300.5	313.9	345.8	733.4	1160.4	1749.3	2336.8	2515.0	2517.4	2359.7	1792.2
70°	181.0	192.6	213.4	426.5	752.0	1384.6	2132.1	2361.6	2375.3	2205.1	1569.4
72.5°	74.6	82.4	101.3	193.3	389.5	878.8	1697.8	2027.6	2059.4	1854.1	1204.5
75°	42.3	46.3	59.5	97.0	169.0	409.5	1028.4	1439.4	1486.3	1277.9	724.6
77.5°	28.1	30.0	38.5	62.8	95.1	139.7	439.5	749.9	839.6	698.0	313.7
80°	18.9	20.5	26.4	42.0	61.8	60.0	140.0	277.8	341.8	239.8	76.5
82.5°	12.7	13.0	18.9	27.6	39.2	29.0	41.3	86.4	108.6	69.4	29.0
85°	7.3	7.1	13.9	16.1	17.5	12.0	12.5	26.0	34.0	29.3	16.5
87.5°	0.9	1.4	5.4	4.2	2.4	2.6	2.6	4.5	6.6	7.1	3.5
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: P881558

CATALOG NUMBER: NAV-SB1A-735-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5
2.5°	410.0	409.8	409.1	408.3	406.7	405.8	406.2	405.8	405.5	405.8	406.7
5°	413.1	412.4	410.5	408.1	404.8	400.8	398.2	394.4	390.9	388.8	389.2
7.5°	421.3	420.6	418.0	411.4	400.8	384.0	368.7	355.2	345.1	339.2	339.4
10°	434.5	433.4	429.4	414.7	386.9	350.3	319.8	294.6	278.1	270.3	269.6
12.5°	450.1	448.7	441.6	411.7	360.4	303.3	261.3	233.2	217.9	211.0	210.3
15°	468.5	466.7	452.7	397.0	322.0	251.4	212.9	191.9	182.0	175.8	176.1
17.5°	491.4	488.1	461.0	375.1	280.2	211.7	183.2	167.4	158.6	152.7	152.2
20°	521.2	515.7	467.6	348.9	241.7	186.7	163.1	149.9	143.3	138.1	137.1
22.5°	562.7	554.9	475.6	320.5	214.6	169.5	148.2	138.6	133.1	127.2	126.3
25°	614.2	605.0	485.5	294.3	195.9	154.6	137.4	129.3	123.0	116.1	115.4
27.5°	686.2	669.6	497.3	272.9	179.9	141.9	127.5	118.5	111.2	105.5	104.3
30°	766.4	739.3	507.7	259.9	165.2	130.1	114.5	105.5	98.7	94.7	93.9
32.5°	842.4	805.6	514.6	254.2	152.0	116.6	100.3	90.6	85.4	84.3	85.0
35°	914.2	865.6	513.9	248.8	140.2	103.1	86.4	76.5	72.5	73.2	73.2
37.5°	996.8	929.5	508.9	240.3	130.5	90.9	74.4	65.6	62.1	62.3	63.3
40°	1092.9	1003.4	505.8	224.2	119.9	79.5	64.4	57.4	54.8	53.8	53.6
42.5°	1195.3	1074.9	506.3	206.1	106.7	69.4	57.6	51.7	49.3	48.6	48.4
45°	1298.2	1143.1	507.0	187.2	92.8	61.6	52.6	47.7	46.3	45.3	45.3
47.5°	1395.0	1201.2	493.8	166.9	79.1	55.7	48.6	45.3	44.1	43.0	43.0
50°	1485.2	1239.9	461.9	143.3	68.2	51.0	45.6	43.2	42.0	40.8	40.8
52.5°	1555.3	1246.1	409.3	119.0	60.7	47.4	43.7	41.5	40.1	38.9	38.7
55°	1586.4	1207.6	334.5	96.3	54.8	44.4	41.8	39.7	38.0	36.8	36.6
57.5°	1578.4	1126.6	260.8	77.4	49.1	41.3	39.4	38.0	36.1	34.2	34.0
60°	1539.0	1018.3	196.6	64.4	43.9	38.0	36.8	35.6	33.0	30.2	29.7
62.5°	1470.8	882.1	140.2	53.3	38.2	34.2	33.8	32.8	29.0	23.8	23.4
65°	1366.4	716.6	94.4	44.4	32.8	30.0	30.2	28.6	23.6	17.7	17.2
67.5°	1214.0	524.0	60.4	36.4	27.4	25.0	25.3	24.3	20.1	15.1	14.4
70°	1019.7	347.0	39.4	27.6	22.0	19.4	20.8	21.0	17.0	12.3	11.8
72.5°	747.5	204.9	27.6	20.5	16.1	13.5	17.0	17.5	13.7	9.2	8.7
75°	426.1	97.2	20.8	14.9	9.9	9.4	13.2	13.2	9.4	6.1	5.7
77.5°	178.9	40.6	14.6	9.7	5.7	5.4	9.0	8.3	4.7	2.8	2.8
80°	51.7	18.2	7.8	4.7	2.4	2.1	3.5	2.6	1.2	0.5	0.5
82.5°	20.3	8.0	3.1	1.9	0.9	0.9	0.5	0.0	0.0	0.0	0.0
85°	12.0	3.3	1.4	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)