

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: P881703

Luminaire Tested: **NAV-SB1B-727-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881703
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3565 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

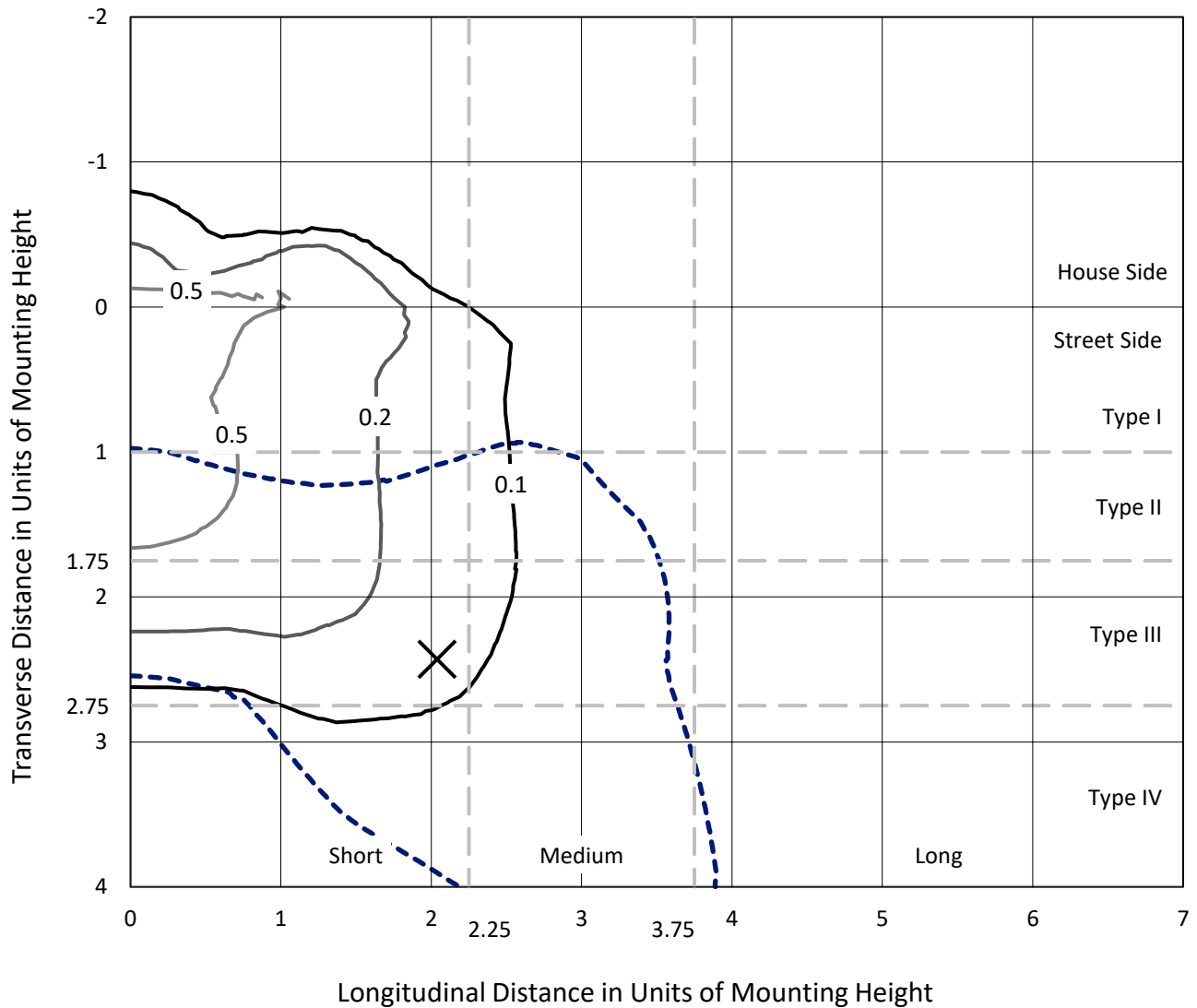
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

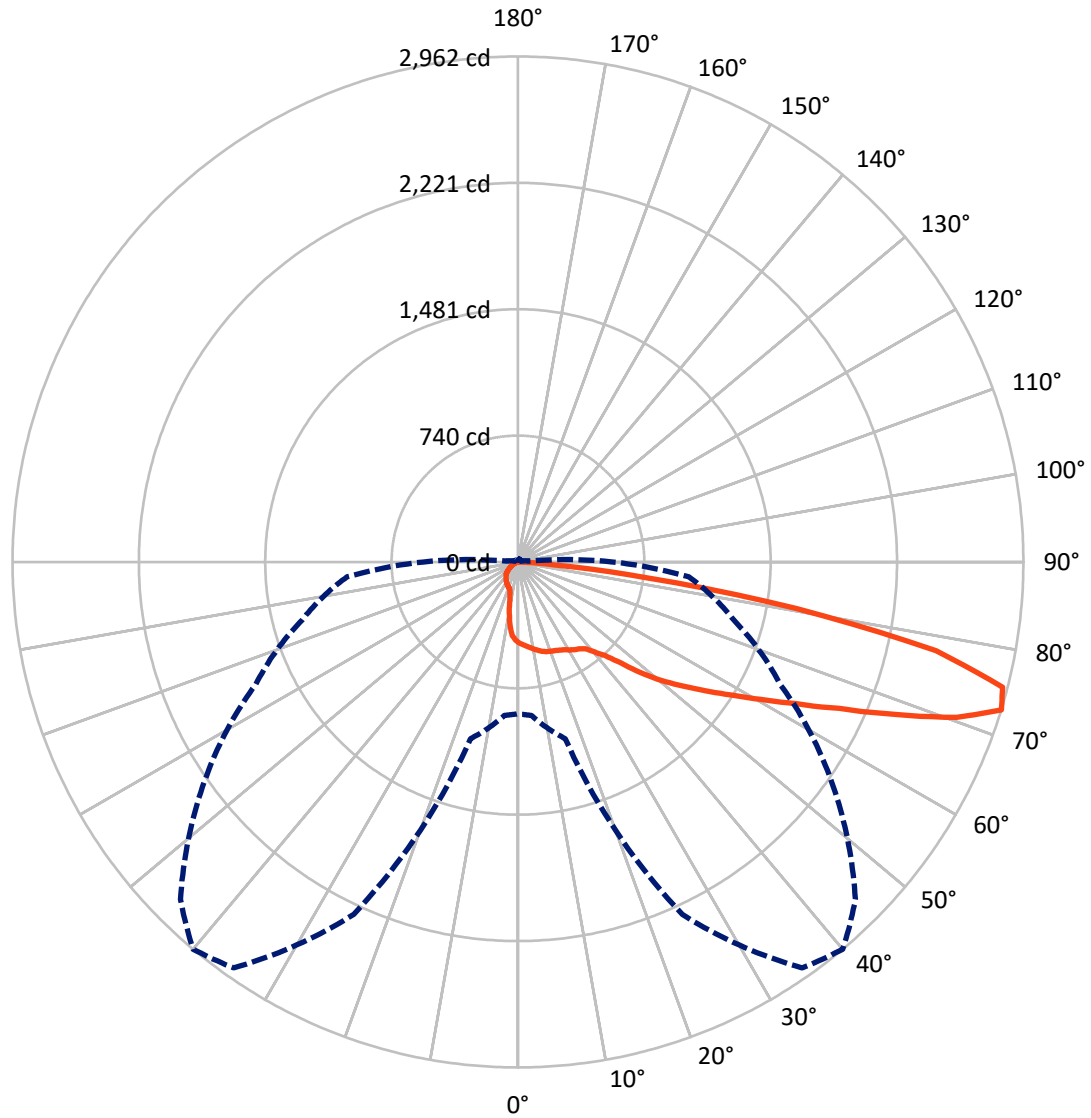
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	460.4	0.0	460.4
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3104.6	0.0	3104.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	3565.0	0.0	3565.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.1	1.2
10°-20°	117.1	3.3
20°-30°	189.4	5.3
30°-40°	279.7	7.8
40°-50°	470.7	13.2
50°-60°	730.8	20.5
60°-70°	914.5	25.7
70°-80°	748.7	21.0
80°-90°	71.0	2.0
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°	3565.0	100.0
0°-180°	3565.0	100.0

Coefficient of Utilization



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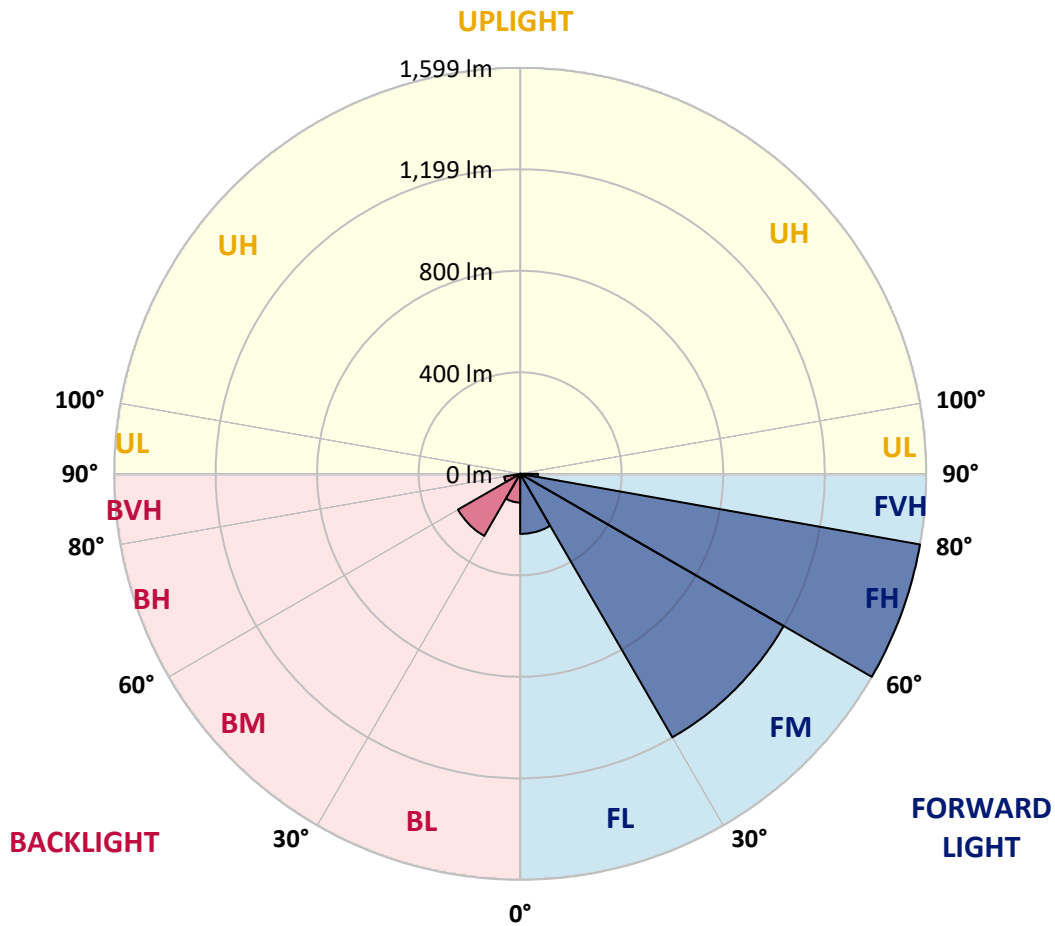
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	236.6	6.6			
FM (30°-60°)	1198.5	33.6			
FH (60°-80°)	1599.1	44.9			G1/1800
FVH (80°-90°)	70.5	2.0			G1/100
BL (0°-30°)	113.0	3.2	B1/500		
BM (30°-60°)	282.7	7.9	B1/1000		
BH (60°-80°)	64.1	1.8	B0/110		G0/110
BVH (80°-90°)	0.5	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0
2.5°	486.3	488.1	487.1	484.9	484.4	483.3	482.0	481.4	479.6	477.9	476.1
5°	500.0	501.8	500.5	497.5	496.2	494.9	493.0	491.4	487.6	484.1	479.8
7.5°	515.0	516.6	515.0	510.7	508.6	506.9	504.3	501.8	497.5	492.4	487.1
10°	531.6	533.0	530.6	524.9	521.4	519.0	516.6	513.9	509.9	504.3	497.8
12.5°	547.2	548.8	545.1	538.4	534.3	531.9	529.2	527.1	523.1	517.7	511.0
15°	561.4	563.9	557.4	550.2	545.6	543.7	541.0	539.7	537.0	533.3	527.1
17.5°	572.2	573.8	567.1	558.5	553.4	552.0	550.2	551.0	550.4	548.6	544.5
20°	581.3	582.4	573.5	563.1	557.4	557.7	557.2	559.8	560.9	560.9	560.6
22.5°	592.6	592.9	581.6	568.4	561.7	563.6	564.4	567.4	569.5	571.7	576.5
25°	607.4	606.8	593.4	575.4	569.5	572.2	574.1	575.1	577.6	581.0	592.1
27.5°	629.4	627.8	610.6	586.7	579.7	582.1	585.6	585.1	584.0	586.7	605.2
30°	657.3	655.2	632.3	602.5	596.1	598.2	599.3	594.5	586.7	589.1	616.8
32.5°	701.6	697.8	666.2	620.3	610.3	612.7	611.4	601.5	589.9	592.3	628.3
35°	778.7	769.5	724.7	657.3	626.4	623.7	620.5	610.9	596.6	594.2	638.0
37.5°	942.5	926.3	849.8	729.5	662.9	645.5	635.6	625.9	603.9	594.2	649.0
40°	1127.2	1110.8	1022.5	850.4	723.6	694.1	670.5	643.6	611.4	597.7	666.2
42.5°	1320.0	1302.0	1211.2	1000.2	810.4	749.7	705.6	657.8	623.7	608.4	689.0
45°	1535.3	1512.8	1394.1	1156.5	936.3	842.0	762.3	687.1	645.2	627.5	720.1
47.5°	1762.5	1733.2	1576.4	1308.2	1071.9	969.8	865.9	739.5	676.9	656.0	762.3
50°	1963.9	1934.9	1764.6	1466.9	1198.6	1091.5	984.1	812.0	724.4	696.2	818.9
52.5°	2108.6	2086.6	1935.9	1630.6	1330.5	1205.6	1091.2	896.3	784.6	747.8	885.8
55°	2205.5	2185.4	2057.3	1785.8	1483.8	1331.3	1196.7	987.8	857.1	809.5	959.6
57.5°	2264.3	2252.8	2145.1	1924.4	1635.7	1468.7	1317.6	1088.5	942.5	882.3	1042.1
60°	2285.3	2275.9	2199.6	2056.5	1819.4	1633.9	1459.6	1202.1	1046.1	965.0	1126.7
62.5°	2229.4	2231.3	2238.8	2213.0	2013.0	1827.2	1629.8	1338.5	1161.0	1058.7	1206.1
65°	1966.5	1982.1	2125.0	2386.5	2269.4	2069.4	1846.5	1505.0	1292.6	1165.3	1269.2
67.5°	1628.2	1650.8	1828.5	2488.0	2542.8	2383.8	2148.3	1717.1	1449.4	1273.8	1293.1
70°	1246.4	1270.6	1485.9	2466.8	2798.6	2727.5	2521.5	1987.0	1611.8	1349.0	1232.2
72.5°	889.6	901.9	1071.6	2278.0	2903.6	2961.6	2796.5	2242.6	1694.8	1307.4	1005.0
75°	625.1	622.9	735.4	1834.4	2740.1	2933.2	2700.1	2104.3	1533.7	1038.6	619.7
77.5°	272.3	272.8	367.3	1114.0	2187.0	2505.2	2244.4	1318.1	1069.2	550.4	261.5
80°	70.6	72.8	134.8	443.6	1316.8	1653.5	1368.8	579.4	494.1	134.3	49.9
82.5°	25.0	26.6	62.0	139.4	485.7	758.3	609.5	185.3	128.9	38.4	13.4
85°	7.2	8.6	33.3	42.7	100.4	214.3	147.9	36.0	31.7	19.9	3.5
87.5°	0.0	1.1	6.7	5.9	5.9	4.0	7.5	4.0	5.1	2.4	1.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0	472.0
2.5°	474.5	472.6	468.5	464.2	460.2	456.5	455.4	451.4	449.5	449.7	449.5
5°	476.9	473.4	465.6	456.2	446.5	435.5	426.4	413.5	402.5	401.1	400.3
7.5°	483.3	477.7	465.1	446.8	422.6	392.3	364.1	336.2	320.3	311.7	311.2
10°	493.2	485.7	466.4	431.5	380.2	326.0	283.3	248.1	230.1	221.8	220.2
12.5°	505.1	496.7	468.5	405.4	325.4	254.3	208.1	186.6	182.9	182.3	182.0
15°	521.7	512.6	471.0	370.3	266.1	193.6	172.4	172.6	175.6	177.2	176.9
17.5°	540.2	531.1	467.5	327.3	207.6	165.4	164.9	167.3	171.6	173.2	172.9
20°	559.0	550.4	455.1	276.8	167.8	157.6	159.8	162.4	166.7	168.9	168.9
22.5°	578.4	570.8	435.5	223.1	151.4	152.0	154.7	157.3	162.2	164.6	164.6
25°	599.0	592.6	409.5	178.8	144.5	146.1	149.6	152.8	157.9	160.8	160.8
27.5°	620.0	615.1	379.9	149.3	138.0	139.9	143.9	148.2	153.3	156.8	157.1
30°	642.8	640.1	356.3	138.3	131.8	133.4	138.0	142.8	148.5	152.8	153.3
32.5°	666.2	665.6	344.8	146.3	126.2	127.3	131.3	136.1	143.1	148.5	149.0
35°	689.3	690.3	338.1	169.2	124.3	121.4	124.1	128.3	136.7	143.4	144.5
37.5°	718.8	721.5	337.8	193.9	128.9	115.5	117.3	120.3	127.5	135.3	136.7
40°	762.8	777.1	355.0	215.1	136.9	110.1	110.6	111.2	114.9	121.4	123.5
42.5°	821.4	863.0	417.0	229.6	140.2	105.3	103.4	100.4	99.9	103.4	105.3
45°	894.1	966.9	526.0	237.6	136.9	99.9	94.8	87.0	84.0	86.5	86.5
47.5°	979.8	1080.7	655.2	239.5	131.6	93.2	84.0	73.8	71.4	72.2	72.0
50°	1063.3	1166.1	768.7	223.9	122.7	84.6	72.2	63.6	62.0	62.3	62.3
52.5°	1137.1	1195.4	801.0	187.1	110.9	74.1	62.0	56.1	55.0	55.0	54.8
55°	1186.0	1163.7	714.2	143.1	96.1	63.4	53.2	50.2	49.7	49.4	48.9
57.5°	1196.2	1060.6	539.4	103.4	75.2	53.4	47.3	45.6	44.6	43.5	43.0
60°	1159.7	888.8	343.4	72.2	56.4	45.6	41.9	40.8	38.7	36.5	35.7
62.5°	1080.7	671.3	190.1	50.2	45.4	38.9	37.1	35.7	31.7	28.2	27.1
65°	974.7	446.3	84.0	39.2	37.1	32.8	31.7	29.8	25.0	20.9	20.1
67.5°	868.1	257.0	37.9	31.4	29.8	26.9	26.0	24.7	21.2	17.5	16.9
70°	746.4	130.2	26.0	25.0	23.1	20.4	21.2	20.9	17.5	14.2	13.7
72.5°	555.8	64.7	19.6	18.8	16.6	14.5	17.5	17.2	13.7	10.7	10.2
75°	314.7	32.0	14.2	13.2	9.9	10.7	14.0	13.2	9.4	7.0	6.4
77.5°	124.9	16.4	9.4	8.1	5.9	7.2	10.2	8.9	4.8	3.0	2.7
80°	28.7	8.1	4.8	3.5	2.7	4.3	5.4	3.2	1.3	0.3	0.0
82.5°	8.1	3.5	1.6	1.3	1.3	1.6	1.3	0.5	0.0	0.0	0.0
85°	2.7	1.6	0.5	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.1	0.5	0.0	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)