

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: P882958

Luminaire Tested: **NAV-SB3A-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882958
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-SB3A-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8574 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

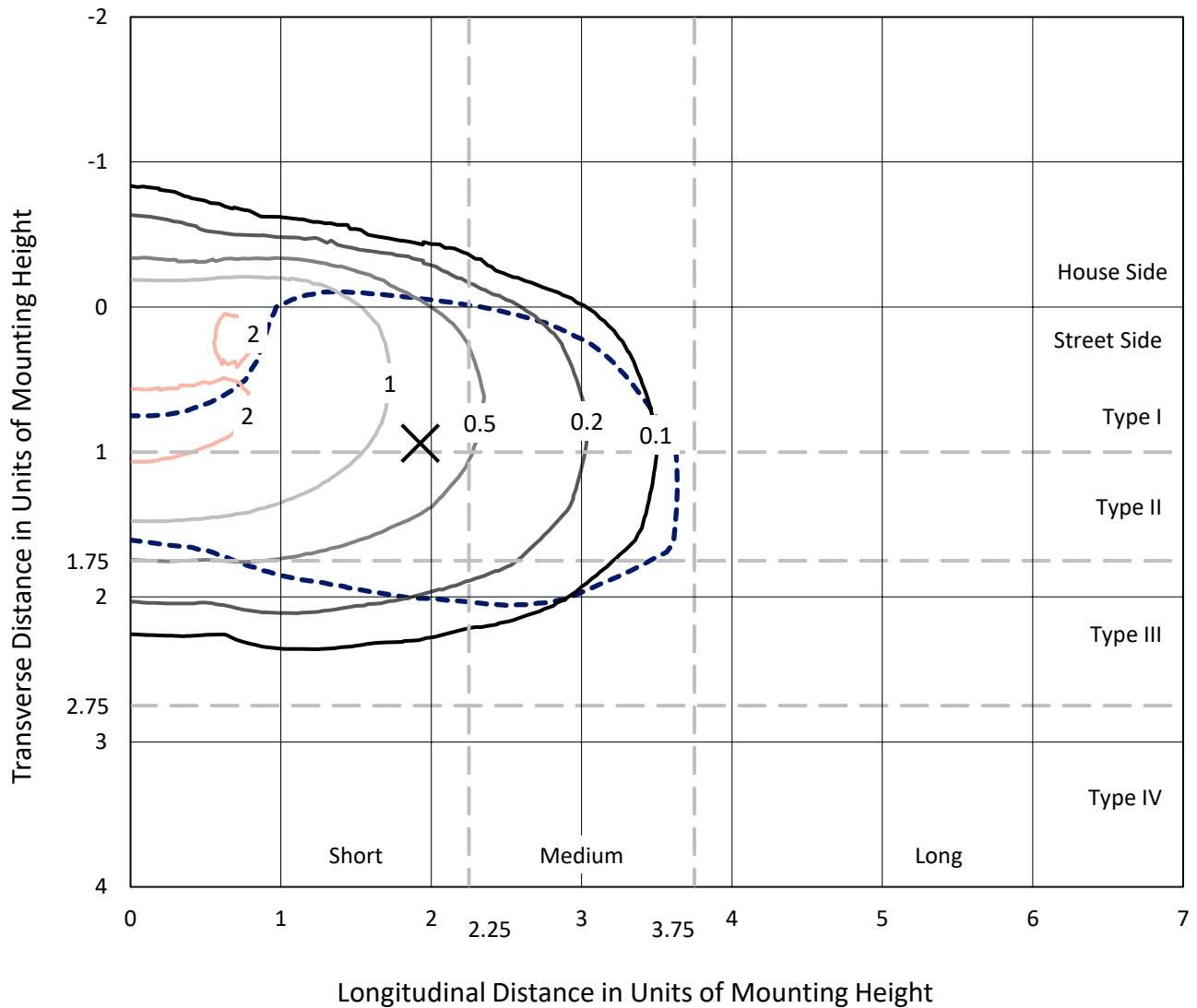
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

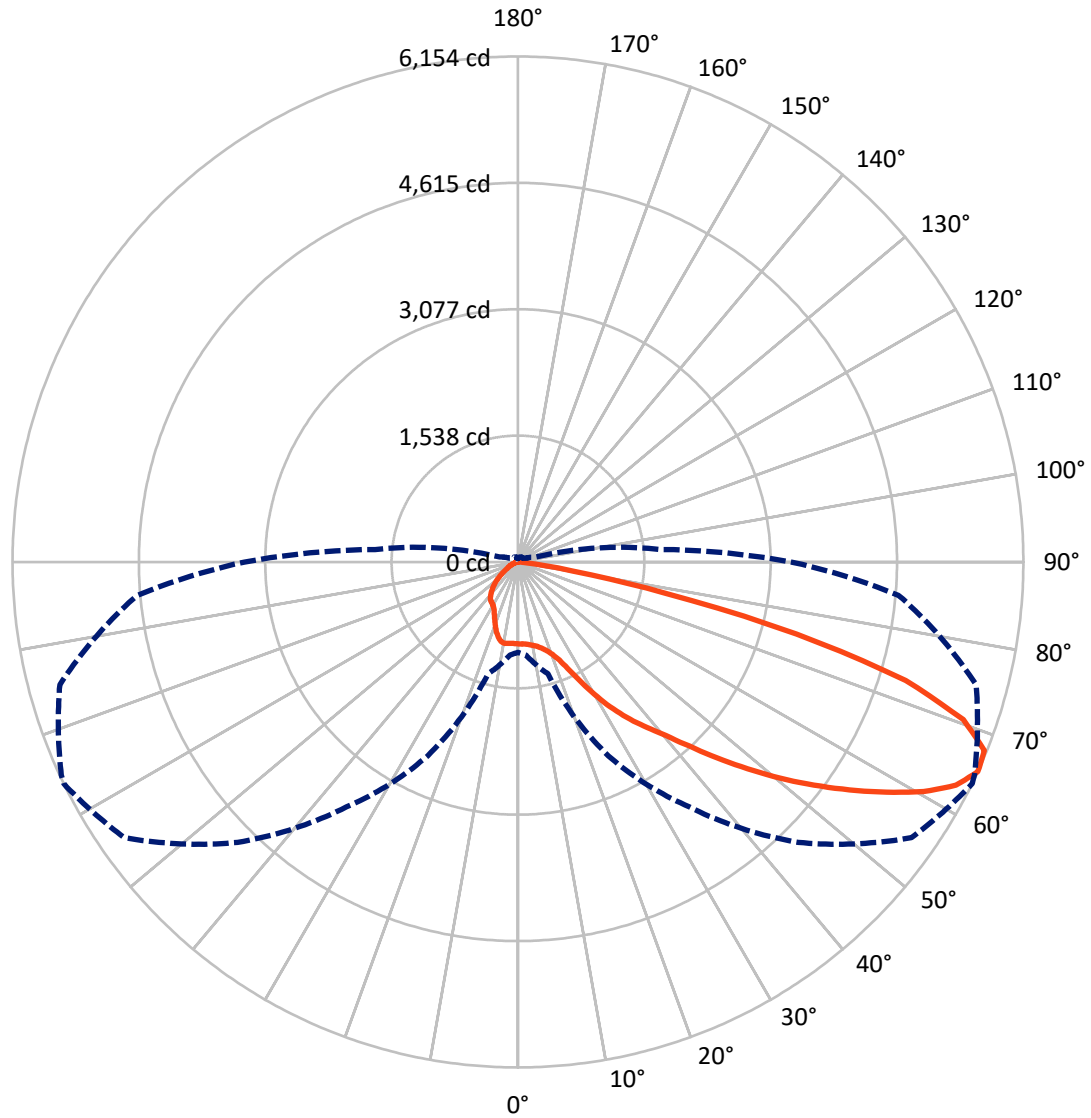
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1146.6	0.0	1146.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7427.4	0.0	7427.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	8574.0	0.0	8574.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	1.1
10°-20°	249.5	2.9
20°-30°	472.9	5.5
30°-40°	956.9	11.2
40°-50°	1630.0	19.0
50°-60°	2216.7	25.9
60°-70°	2081.6	24.3
70°-80°	834.0	9.7
80°-90°	40.4	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°	8574.0	100.0
0°-180°	8574.0	100.0

Coefficient of Utilization



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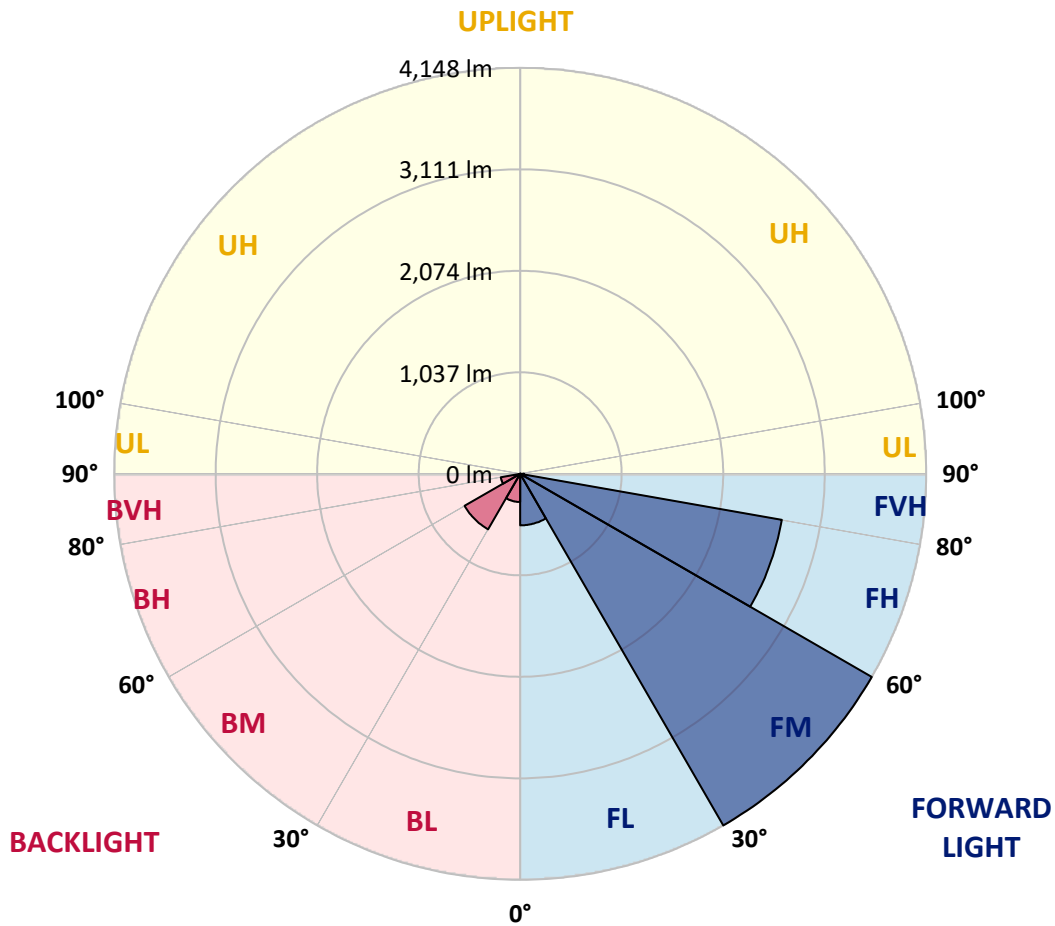
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	526.5	6.1			
FM (30°-60°)	4148.1	48.4			
FH (60°-80°)	2714.3	31.7			G2/5000
FVH (80°-90°)	38.4	0.4			G1/100
BL (0°-30°)	287.9	3.4	B1/500		
BM (30°-60°)	655.5	7.6	B1/1000		
BH (60°-80°)	201.2	2.3	B1/500		G1/500
BVH (80°-90°)	2.0	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	993.8	1000.7	999.0	997.2	996.7	997.8	998.4	997.8	997.8	997.8	998.4
5°	974.8	980.6	980.6	984.6	990.3	997.2	1002.4	1003.6	1004.7	1006.4	1005.9
7.5°	938.6	943.2	946.7	959.9	974.3	992.6	1008.2	1016.2	1017.4	1023.7	1026.0
10°	913.9	919.6	925.4	939.2	959.9	987.5	1013.9	1033.5	1036.3	1051.3	1058.2
12.5°	912.8	918.5	926.0	940.9	965.1	994.4	1026.6	1054.7	1059.9	1081.7	1096.1
15°	924.8	931.7	938.6	957.0	982.9	1018.5	1053.0	1088.1	1093.2	1124.3	1139.8
17.5°	949.5	958.7	963.9	982.3	1009.9	1049.6	1095.0	1135.2	1139.8	1176.0	1195.5
20°	998.4	1009.3	1011.0	1026.0	1053.0	1095.5	1149.6	1199.6	1205.3	1246.7	1268.5
22.5°	1099.6	1115.1	1101.3	1108.8	1132.9	1175.4	1234.1	1297.3	1305.3	1352.5	1372.0
25°	1277.7	1299.6	1263.9	1251.3	1261.6	1305.9	1379.5	1459.4	1468.6	1506.5	1516.3
27.5°	1627.8	1599.6	1545.6	1492.7	1461.7	1487.0	1569.7	1668.6	1680.1	1716.9	1705.4
30°	2012.3	1987.6	1914.6	1797.3	1723.8	1719.7	1796.2	1906.5	1919.8	1954.8	1919.8
32.5°	2397.4	2373.8	2294.5	2150.3	2022.7	1959.4	2012.3	2134.7	2141.6	2164.1	2112.3
35°	2776.2	2752.1	2672.7	2525.0	2368.1	2224.4	2214.1	2352.0	2354.3	2377.9	2300.8
37.5°	3157.3	3137.2	3052.7	2907.8	2753.2	2554.9	2458.9	2557.8	2560.6	2583.6	2503.7
40°	3429.1	3437.8	3379.7	3267.6	3134.9	2918.2	2733.7	2776.8	2759.5	2798.0	2750.3
42.5°	3662.5	3679.7	3629.2	3572.8	3495.8	3305.0	3073.9	3066.5	3038.9	3059.6	3010.1
45°	3864.3	3878.6	3833.2	3820.0	3818.3	3684.3	3445.8	3401.0	3362.5	3358.4	3299.2
47.5°	3938.4	3966.0	3985.5	4029.8	4116.0	4059.7	3830.3	3760.8	3717.7	3686.1	3592.4
50°	3966.6	3995.9	4062.6	4191.3	4395.4	4419.5	4213.1	4135.0	4082.1	4024.6	3886.7
52.5°	3928.6	3980.9	4070.6	4287.3	4583.3	4708.0	4580.4	4512.0	4451.7	4358.0	4153.4
55°	3705.0	3757.3	3940.7	4286.1	4677.0	4910.4	4927.6	4897.1	4829.3	4681.6	4368.9
57.5°	3233.7	3311.3	3601.6	4140.1	4675.3	5084.5	5267.9	5289.7	5213.8	5002.3	4538.5
60°	2580.8	2686.0	3040.0	3816.5	4531.0	5178.8	5566.2	5675.4	5594.9	5318.4	4675.8
62.5°	1800.8	1922.6	2257.7	3309.6	4201.1	5111.0	5784.0	5985.8	5924.8	5601.2	4728.7
65°	1098.4	1137.5	1407.6	2604.3	3640.1	4827.0	5851.3	6153.6	6133.5	5774.3	4650.6
67.5°	731.7	764.5	842.1	1785.8	2825.6	4259.7	5690.3	6124.3	6130.0	5746.1	4364.3
70°	440.9	469.0	519.6	1038.6	1831.3	3371.7	5192.0	5750.7	5784.0	5369.6	3821.7
72.5°	181.6	200.6	246.6	470.7	948.4	2139.9	4134.4	4937.4	5015.0	4514.9	2933.1
75°	102.9	112.7	144.8	236.2	411.5	997.2	2504.3	3505.0	3619.4	3111.9	1764.6
77.5°	68.4	73.0	93.7	152.9	231.6	340.3	1070.2	1826.1	2044.5	1699.6	763.9
80°	46.0	50.0	64.4	102.3	150.6	146.0	340.8	676.5	832.3	584.0	186.2
82.5°	31.0	31.6	46.0	67.2	95.4	70.7	100.6	210.4	264.4	169.0	70.7
85°	17.8	17.2	33.9	39.1	42.5	29.3	30.5	63.2	82.8	71.3	40.2
87.5°	2.3	3.4	13.2	10.3	5.7	6.3	6.3	10.9	16.1	17.2	8.6
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°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	998.4	997.8	996.1	994.4	990.3	988.0	989.2	988.0	987.5	988.0	990.3
5°	1005.9	1004.1	999.5	993.8	985.7	976.0	969.7	960.5	951.8	946.7	947.8
7.5°	1026.0	1024.3	1017.9	1001.8	976.0	935.2	897.8	865.0	840.3	826.0	826.5
10°	1058.2	1055.3	1045.5	1009.9	942.1	853.0	778.8	717.3	677.1	658.1	656.4
12.5°	1096.1	1092.7	1075.4	1002.4	877.7	738.6	636.3	567.9	530.5	513.9	512.1
15°	1140.9	1136.3	1102.4	966.8	784.0	612.1	518.5	467.3	443.2	428.2	428.8
17.5°	1196.7	1188.6	1122.5	913.3	682.3	515.6	446.0	407.5	386.3	371.9	370.7
20°	1269.1	1255.9	1138.6	849.5	588.6	454.7	397.2	365.0	348.9	336.2	333.9
22.5°	1370.3	1351.3	1158.2	780.6	522.5	412.7	361.0	337.4	324.2	309.8	307.5
25°	1495.6	1473.2	1182.3	716.8	477.1	376.5	334.5	315.0	299.5	282.8	281.1
27.5°	1670.9	1630.7	1211.1	664.4	438.0	345.4	310.4	288.5	270.7	256.9	254.1
30°	1866.3	1800.2	1236.4	632.8	402.3	316.7	278.8	256.9	240.3	230.5	228.8
32.5°	2051.4	1961.7	1253.0	619.0	370.2	283.9	244.3	220.7	208.1	205.2	206.9
35°	2226.1	2107.7	1251.3	605.8	341.4	251.2	210.4	186.2	176.5	178.2	178.2
37.5°	2427.3	2263.5	1239.2	585.1	317.9	221.3	181.1	159.8	151.2	151.7	154.0
40°	2661.2	2443.4	1231.8	546.0	292.0	193.7	156.9	139.7	133.3	131.1	130.5
42.5°	2910.7	2617.6	1232.9	501.8	259.8	169.0	140.2	125.9	120.1	118.4	117.8
45°	3161.3	2783.7	1234.6	455.8	225.9	150.0	128.2	116.1	112.7	110.4	110.4
47.5°	3397.0	2925.1	1202.4	406.4	192.6	135.6	118.4	110.4	107.5	104.6	104.6
50°	3616.5	3019.3	1124.8	348.9	166.1	124.2	110.9	105.2	102.3	99.4	99.4
52.5°	3787.2	3034.3	996.7	289.7	147.7	115.5	106.3	101.2	97.7	94.8	94.3
55°	3863.1	2940.6	814.5	234.5	133.3	108.1	101.7	96.6	92.5	89.7	89.1
57.5°	3843.6	2743.4	635.1	188.5	119.6	100.6	96.0	92.5	87.9	83.3	82.8
60°	3747.6	2479.6	478.8	156.9	106.9	92.5	89.7	86.8	80.5	73.6	72.4
62.5°	3581.5	2148.0	341.4	129.9	93.1	83.3	82.2	79.9	70.7	58.1	56.9
65°	3327.4	1745.0	229.9	108.1	79.9	73.0	73.6	69.5	57.5	43.1	42.0
67.5°	2956.1	1276.0	147.1	88.5	66.7	60.9	61.5	59.2	48.9	36.8	35.1
70°	2483.1	844.9	96.0	67.2	53.5	47.1	50.6	51.2	41.4	29.9	28.7
72.5°	1820.3	498.9	67.2	50.0	39.1	32.8	41.4	42.5	33.3	22.4	21.3
75°	1037.5	236.8	50.6	36.2	24.1	23.0	32.2	32.2	23.0	14.9	13.8
77.5°	435.7	98.9	35.6	23.6	13.8	13.2	21.8	20.1	11.5	6.9	6.9
80°	125.9	44.3	19.0	11.5	5.7	5.2	8.6	6.3	2.9	1.1	1.1
82.5°	49.4	19.5	7.5	4.6	2.3	2.3	1.1	0.0	0.0	0.0	0.0
85°	29.3	8.0	3.4	1.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	1.7	1.1	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)