

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: P883128

Luminaire Tested: **NAV-SB3B-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883128
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-SB3B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA 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: 10763 lumens
Efficiency: N/A
Efficacy: 98.6 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

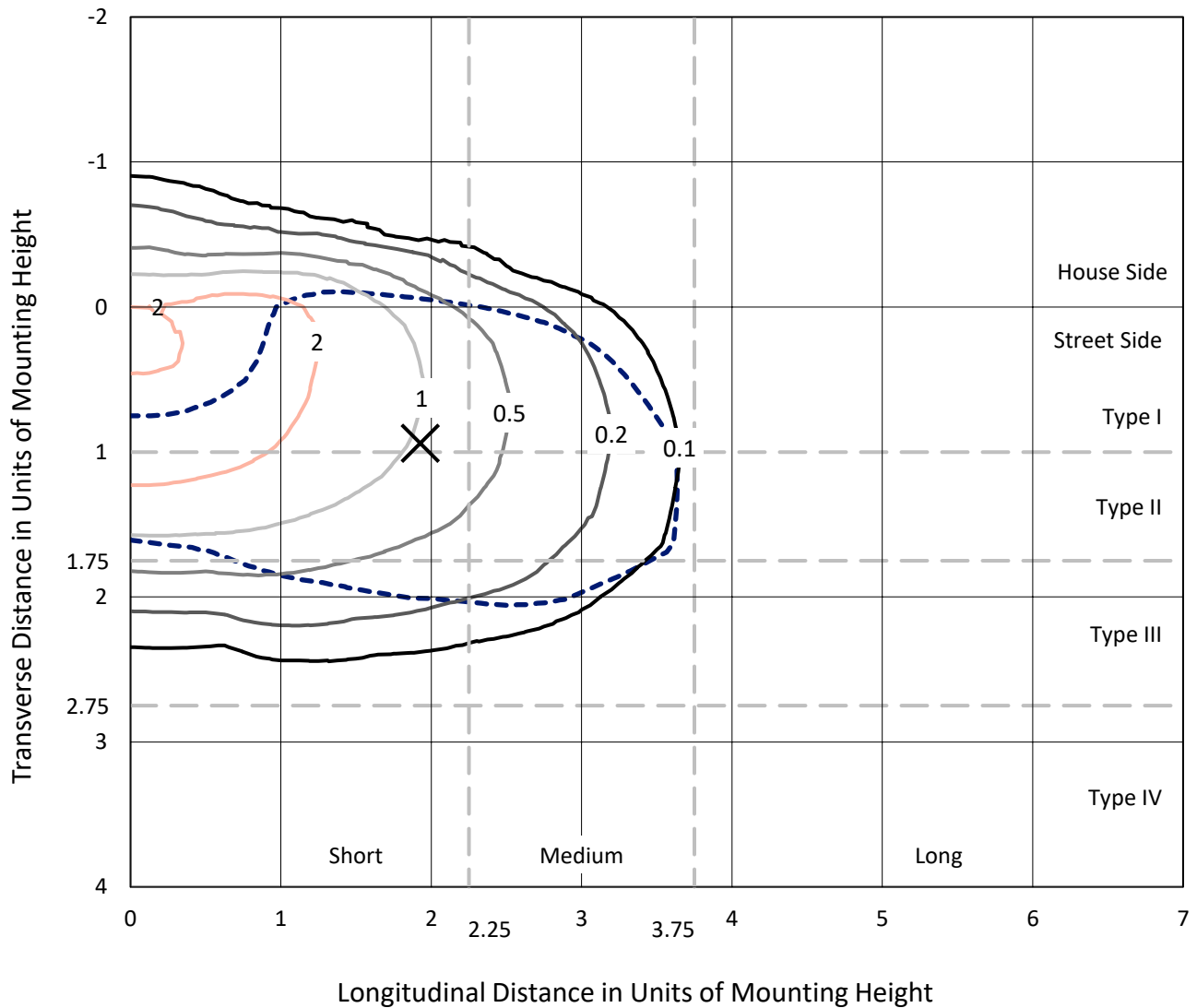
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

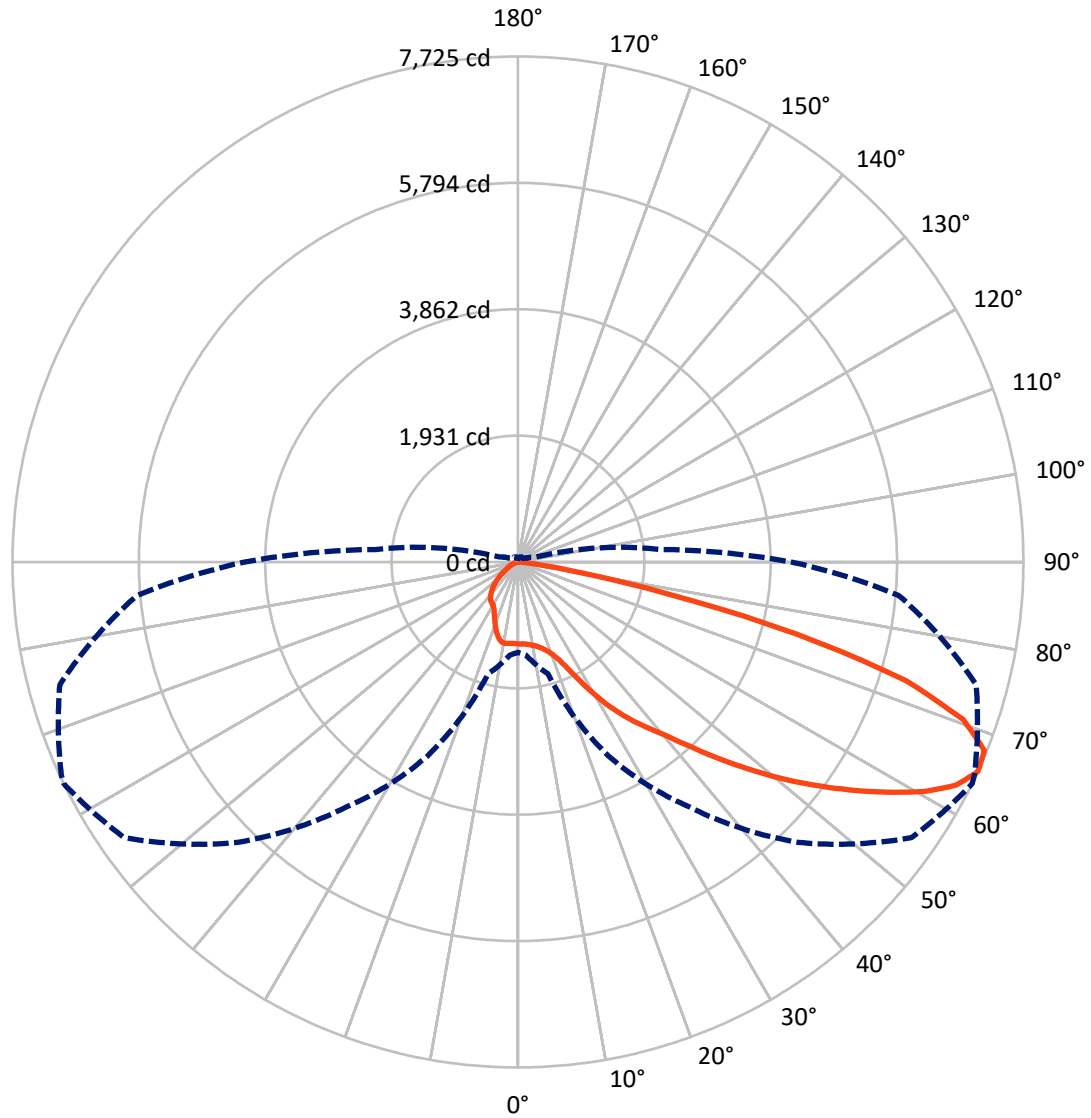
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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	1439.3	0.0	1439.3
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	9323.7	0.0	9323.7
	% Fixture	86.6	0.0	86.6
Total	Lumens	10763.0	0.0	10763.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	1.1
10°-20°	313.3	2.9
20°-30°	593.6	5.5
30°-40°	1201.2	11.2
40°-50°	2046.2	19.0
50°-60°	2782.7	25.9
60°-70°	2613.0	24.3
70°-80°	1046.9	9.7
80°-90°	50.7	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°	10763.0	100.0
0°-180°	10763.0	100.0

Coefficient of Utilization



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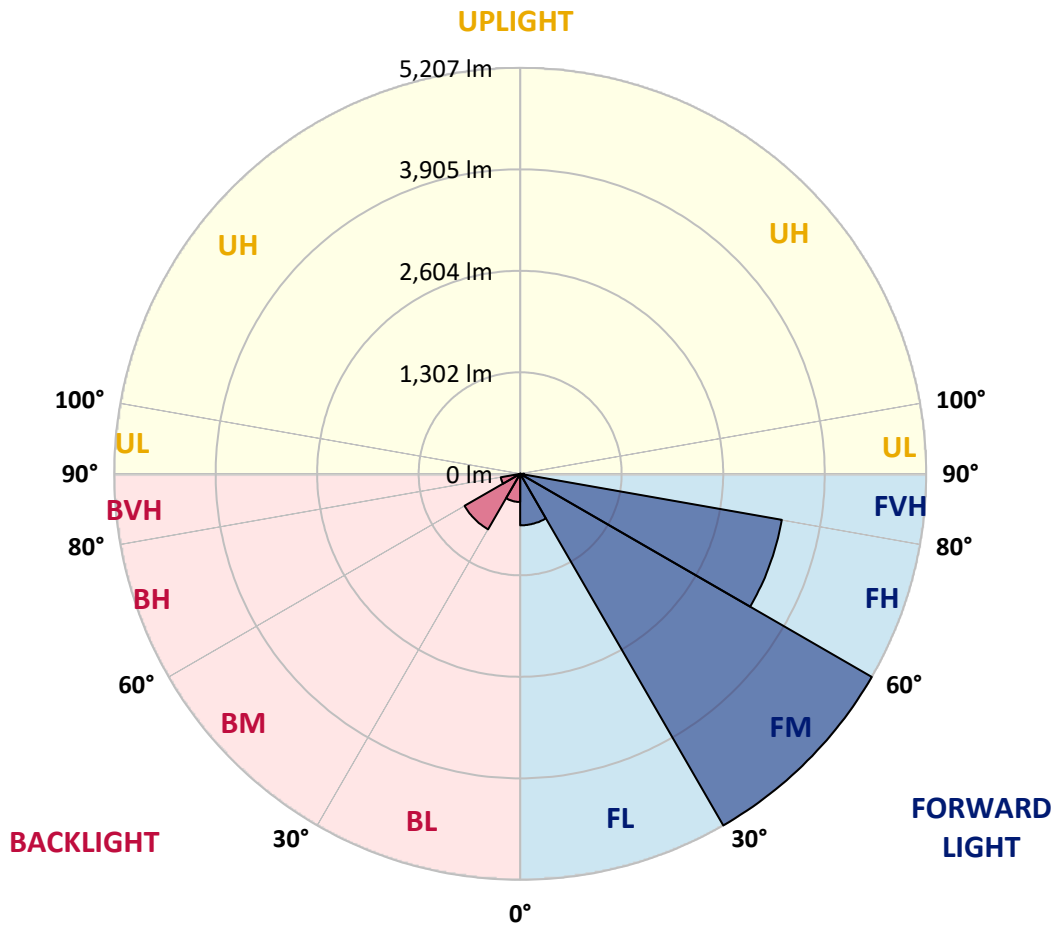
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	661.0	6.1			
FM (30°-60°)	5207.1	48.4			
FH (60°-80°)	3407.3	31.7			G2/5000
FVH (80°-90°)	48.2	0.4			G1/100
BL (0°-30°)	361.4	3.4	B1/500		
BM (30°-60°)	822.9	7.6	B1/1000		
BH (60°-80°)	252.6	2.3	B1/500		G1/500
BVH (80°-90°)	2.5	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8
2.5°	1247.5	1256.2	1254.0	1251.8	1251.1	1252.6	1253.3	1252.6	1252.6	1252.6	1253.3
5°	1223.7	1230.9	1230.9	1236.0	1243.2	1251.8	1258.3	1259.8	1261.2	1263.4	1262.7
7.5°	1178.3	1184.0	1188.4	1204.9	1223.0	1246.1	1265.6	1275.7	1277.1	1285.0	1287.9
10°	1147.2	1154.4	1161.7	1179.0	1204.9	1239.6	1272.8	1297.3	1300.9	1319.7	1328.3
12.5°	1145.8	1153.0	1162.4	1181.1	1211.4	1248.2	1288.6	1324.0	1330.5	1357.9	1376.0
15°	1160.9	1169.6	1178.3	1201.3	1233.8	1278.5	1321.8	1365.8	1372.3	1411.3	1430.8
17.5°	1192.0	1203.5	1210.0	1233.1	1267.7	1317.5	1374.5	1425.0	1430.8	1476.2	1500.8
20°	1253.3	1267.0	1269.2	1287.9	1321.8	1375.2	1443.1	1505.8	1513.0	1565.0	1592.4
22.5°	1380.3	1399.8	1382.4	1391.8	1422.1	1475.5	1549.1	1628.5	1638.6	1697.8	1722.3
25°	1604.0	1631.4	1586.6	1570.8	1583.8	1639.3	1731.7	1832.0	1843.5	1891.1	1903.4
27.5°	2043.4	2008.0	1940.2	1873.8	1834.8	1866.6	1970.5	2094.6	2109.0	2155.2	2140.8
30°	2526.1	2495.0	2403.4	2256.2	2163.9	2158.8	2254.8	2393.3	2409.9	2453.9	2409.9
32.5°	3009.5	2979.9	2880.3	2699.2	2539.1	2459.7	2526.1	2679.7	2688.4	2716.5	2651.6
35°	3485.0	3454.7	3355.1	3169.7	2972.7	2792.3	2779.3	2952.5	2955.4	2985.0	2888.3
37.5°	3963.3	3938.1	3832.0	3650.2	3456.1	3207.2	3086.7	3210.8	3214.4	3243.3	3143.0
40°	4304.6	4315.5	4242.6	4101.9	3935.2	3663.2	3431.6	3485.7	3464.0	3512.4	3452.5
42.5°	4597.6	4619.2	4555.7	4485.0	4388.3	4148.8	3858.7	3849.3	3814.7	3840.7	3778.6
45°	4850.8	4868.9	4811.9	4795.3	4793.1	4625.0	4325.6	4269.3	4220.9	4215.9	4141.6
47.5°	4943.9	4978.5	5003.1	5058.6	5166.9	5096.1	4808.3	4720.9	4666.8	4627.2	4509.5
50°	4979.3	5016.1	5099.8	5261.4	5517.5	5547.8	5288.8	5190.7	5124.3	5052.1	4879.0
52.5°	4931.6	4997.3	5109.9	5381.9	5753.5	5910.0	5749.8	5664.0	5588.2	5470.6	5213.8
55°	4651.0	4716.6	4946.8	5380.4	5871.1	6164.0	6185.6	6147.4	6062.3	5876.8	5484.3
57.5°	4059.3	4156.7	4521.1	5197.2	5868.9	6382.6	6612.8	6640.2	6545.0	6279.4	5697.2
60°	3239.7	3371.7	3816.2	4790.9	5687.8	6501.0	6987.3	7124.4	7023.3	6676.3	5869.6
62.5°	2260.5	2413.5	2834.2	4154.6	5273.6	6415.8	7260.7	7514.0	7437.5	7031.3	5936.0
65°	1378.8	1427.9	1767.0	3269.2	4569.4	6059.4	7345.1	7724.7	7699.4	7248.5	5837.9
67.5°	918.5	959.6	1057.0	2241.8	3547.0	5347.2	7143.1	7687.9	7695.1	7213.1	5478.6
70°	553.4	588.8	652.3	1303.8	2298.8	4232.5	6517.5	7218.9	7260.7	6740.5	4797.4
72.5°	228.0	251.8	309.5	590.9	1190.5	2686.2	5189.9	6197.9	6295.3	5667.6	3682.0
75°	129.2	141.4	181.8	296.5	516.6	1251.8	3143.7	4399.9	4543.5	3906.3	2215.1
77.5°	85.9	91.6	117.6	191.9	290.8	427.1	1343.5	2292.3	2566.5	2133.6	958.9
80°	57.7	62.8	80.8	128.4	189.0	183.3	427.9	849.2	1044.8	733.1	233.8
82.5°	39.0	39.7	57.7	84.4	119.8	88.7	126.3	264.1	331.9	212.1	88.7
85°	22.4	21.6	42.6	49.1	53.4	36.8	38.2	79.4	103.9	89.5	50.5
87.5°	2.9	4.3	16.6	13.0	7.2	7.9	7.9	13.7	20.2	21.6	10.8
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°	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8
2.5°	1253.3	1252.6	1250.4	1248.2	1243.2	1240.3	1241.7	1240.3	1239.6	1240.3	1243.2
5°	1262.7	1260.5	1254.7	1247.5	1237.4	1225.2	1217.2	1205.7	1194.8	1188.4	1189.8
7.5°	1287.9	1285.8	1277.8	1257.6	1225.2	1173.9	1127.0	1085.9	1054.9	1036.8	1037.6
10°	1328.3	1324.7	1312.5	1267.7	1182.6	1070.7	977.7	900.5	850.0	826.1	824.0
12.5°	1376.0	1371.6	1350.0	1258.3	1101.8	927.2	798.7	712.9	666.0	645.0	642.9
15°	1432.2	1426.5	1383.9	1213.6	984.2	768.4	650.8	586.6	556.3	537.5	538.3
17.5°	1502.2	1492.1	1409.1	1146.5	856.5	647.2	559.9	511.6	484.9	466.8	465.4
20°	1593.1	1576.5	1429.3	1066.4	738.8	570.7	498.6	458.2	438.0	422.1	419.2
22.5°	1720.1	1696.3	1453.9	979.8	655.9	518.1	453.1	423.5	406.9	388.9	386.0
25°	1877.4	1849.3	1484.2	899.7	598.9	472.6	419.9	395.4	375.9	355.0	352.8
27.5°	2097.5	2047.0	1520.3	834.1	549.8	433.6	389.6	362.2	339.8	322.5	318.9
30°	2342.8	2259.8	1552.0	794.4	505.1	397.6	349.9	322.5	301.6	289.3	287.2
32.5°	2575.1	2462.6	1572.9	777.1	464.7	356.4	306.6	277.1	261.2	257.6	259.7
35°	2794.5	2645.8	1570.8	760.5	428.6	315.3	264.1	233.8	221.5	223.7	223.7
37.5°	3047.0	2841.4	1555.6	734.5	399.0	277.8	227.3	200.6	189.8	190.5	193.4
40°	3340.7	3067.2	1546.2	685.5	366.5	243.2	197.0	175.3	167.4	164.5	163.8
42.5°	3653.8	3285.8	1547.7	629.9	326.1	212.1	176.1	158.0	150.8	148.6	147.9
45°	3968.4	3494.4	1549.8	572.2	283.6	188.3	160.9	145.7	141.4	138.5	138.5
47.5°	4264.2	3671.8	1509.4	510.1	241.7	170.3	148.6	138.5	134.9	131.3	131.3
50°	4539.8	3790.2	1412.0	438.0	208.5	155.8	139.3	132.0	128.4	124.8	124.8
52.5°	4754.1	3808.9	1251.1	363.6	185.4	145.0	133.5	127.0	122.7	119.1	118.3
55°	4849.4	3691.3	1022.4	294.4	167.4	135.6	127.7	121.2	116.2	112.6	111.8
57.5°	4824.8	3443.8	797.3	236.7	150.1	126.3	120.5	116.2	110.4	104.6	103.9
60°	4704.4	3112.7	601.0	197.0	134.2	116.2	112.6	109.0	101.0	92.4	90.9
62.5°	4495.8	2696.3	428.6	163.1	116.9	104.6	103.2	100.3	88.7	72.9	71.4
65°	4176.9	2190.6	288.6	135.6	100.3	91.6	92.4	87.3	72.2	54.1	52.7
67.5°	3710.8	1601.8	184.7	111.1	83.7	76.5	77.2	74.3	61.3	46.2	44.0
70°	3117.0	1060.6	120.5	84.4	67.1	59.2	63.5	64.2	51.9	37.5	36.1
72.5°	2285.1	626.3	84.4	62.8	49.1	41.1	51.9	53.4	41.8	28.1	26.7
75°	1302.4	297.3	63.5	45.5	30.3	28.9	40.4	40.4	28.9	18.8	17.3
77.5°	546.9	124.1	44.7	29.6	17.3	16.6	27.4	25.3	14.4	8.7	8.7
80°	158.0	55.6	23.8	14.4	7.2	6.5	10.8	7.9	3.6	1.4	1.4
82.5°	62.1	24.5	9.4	5.8	2.9	2.9	1.4	0.0	0.0	0.0	0.0
85°	36.8	10.1	4.3	2.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	2.2	1.4	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)