

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: P883148

Luminaire Tested: **NAV-SB3B-835-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883148
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-835-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 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: 11177 lumens
Efficiency: N/A
Efficacy: 102.4 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

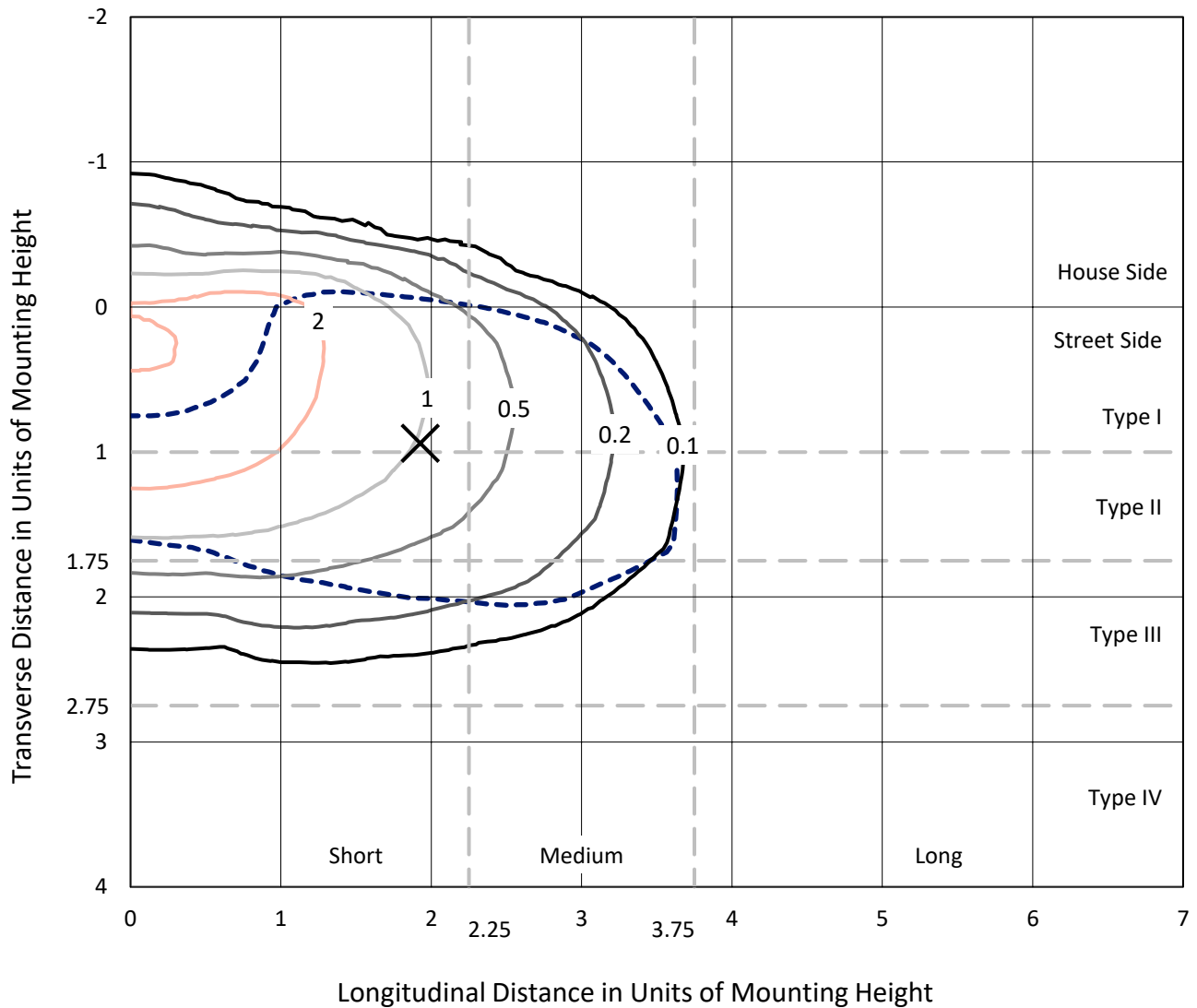
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

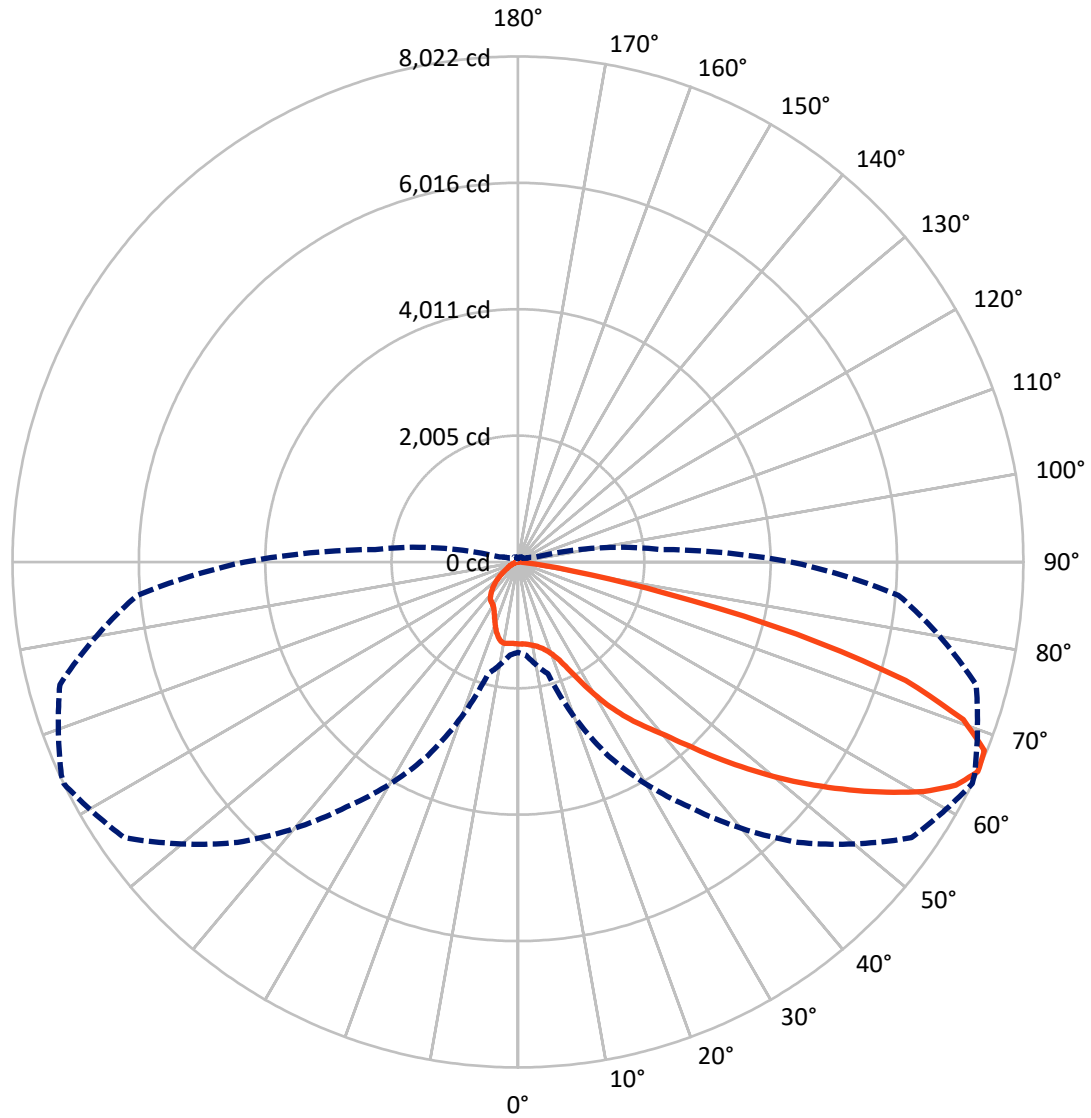
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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	1494.7	0.0	1494.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	9682.3	0.0	9682.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	11177.0	0.0	11177.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	1.1
10°-20°	325.3	2.9
20°-30°	616.4	5.5
30°-40°	1247.4	11.2
40°-50°	2124.9	19.0
50°-60°	2889.7	25.9
60°-70°	2713.6	24.3
70°-80°	1087.2	9.7
80°-90°	52.7	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°	11177.0	100.0
0°-180°	11177.0	100.0

Coefficient of Utilization



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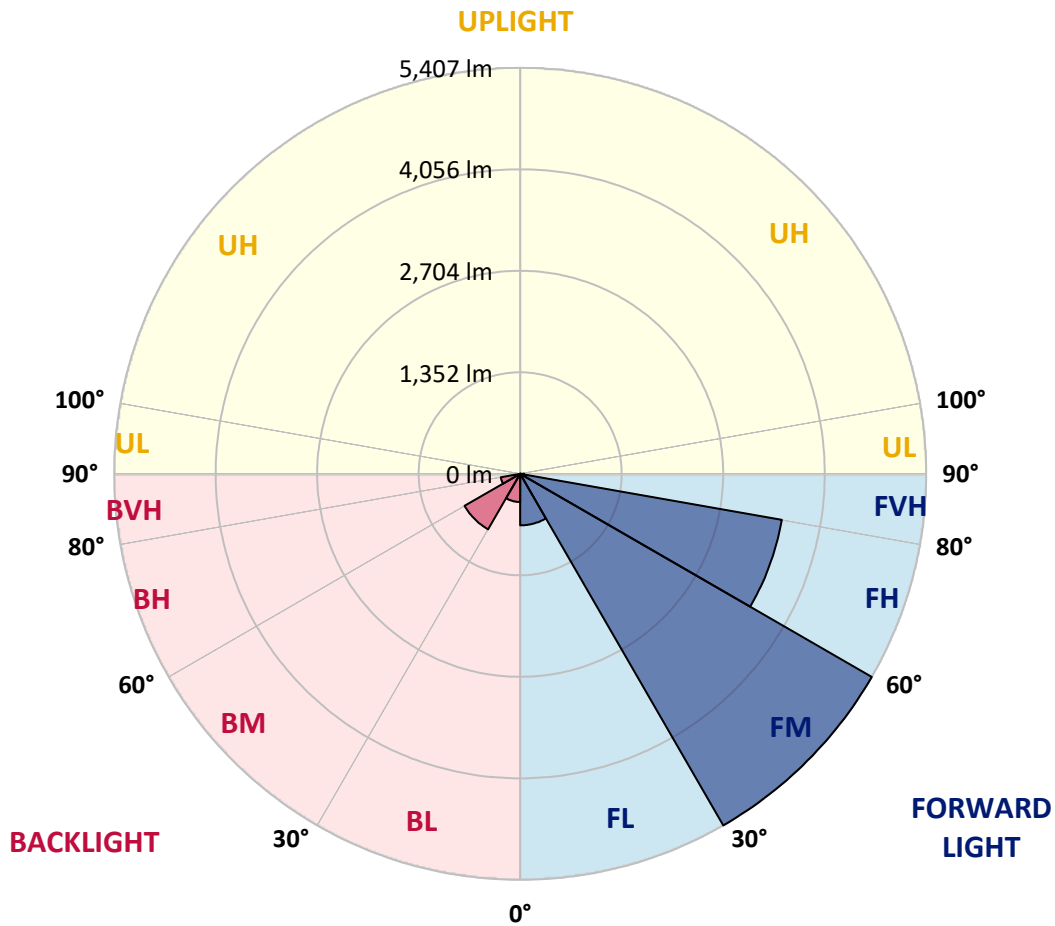
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	686.4	6.1			
FM (30°-60°)	5407.4	48.4			
FH (60°-80°)	3538.4	31.7			G2/5000
FVH (80°-90°)	50.1	0.4			G1/100
BL (0°-30°)	375.3	3.4	B1/500		
BM (30°-60°)	854.5	7.6	B1/1000		
BH (60°-80°)	262.3	2.3	B1/500		G1/500
BVH (80°-90°)	2.6	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°	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0
2.5°	1295.5	1304.5	1302.2	1300.0	1299.3	1300.8	1301.5	1300.8	1300.8	1300.8	1301.5
5°	1270.8	1278.3	1278.3	1283.5	1291.0	1300.0	1306.7	1308.2	1309.7	1312.0	1311.2
7.5°	1223.6	1229.6	1234.1	1251.3	1270.0	1294.0	1314.2	1324.7	1326.2	1334.5	1337.5
10°	1191.4	1198.8	1206.3	1224.3	1251.3	1287.3	1321.7	1347.2	1351.0	1370.4	1379.4
12.5°	1189.9	1197.3	1207.1	1226.6	1258.0	1296.3	1338.2	1374.9	1381.7	1410.1	1428.9
15°	1205.6	1214.6	1223.6	1247.6	1281.3	1327.7	1372.7	1418.4	1425.1	1465.6	1485.8
17.5°	1237.8	1249.8	1256.5	1280.5	1316.5	1368.2	1427.4	1479.8	1485.8	1533.0	1558.5
20°	1301.5	1315.7	1318.0	1337.5	1372.7	1428.1	1498.6	1563.7	1571.2	1625.2	1653.7
22.5°	1433.4	1453.6	1435.6	1445.4	1476.8	1532.3	1608.7	1691.1	1701.6	1763.1	1788.5
25°	1665.6	1694.1	1647.7	1631.2	1644.7	1702.4	1798.3	1902.4	1914.4	1963.9	1976.6
27.5°	2122.0	2085.2	2014.8	1945.9	1905.4	1938.4	2046.3	2175.2	2190.1	2238.1	2223.1
30°	2623.2	2591.0	2495.9	2343.0	2247.1	2241.8	2341.5	2485.4	2502.6	2548.3	2502.6
32.5°	3125.2	3094.5	2991.1	2803.1	2636.7	2554.3	2623.2	2782.8	2791.8	2821.0	2753.6
35°	3619.0	3587.6	3484.2	3291.6	3087.0	2899.7	2886.2	3066.1	3069.1	3099.8	2999.4
37.5°	4115.8	4089.6	3979.4	3790.6	3589.1	3330.6	3205.4	3334.3	3338.0	3368.0	3263.9
40°	4470.2	4481.4	4405.8	4259.7	4086.6	3804.1	3563.6	3619.8	3597.3	3647.5	3585.3
42.5°	4774.4	4796.9	4731.0	4657.5	4557.1	4308.4	4007.2	3997.4	3961.4	3988.4	3924.0
45°	5037.4	5056.1	4996.9	4979.7	4977.5	4802.9	4491.9	4433.5	4383.3	4378.0	4300.9
47.5°	5134.1	5170.0	5195.5	5253.2	5365.6	5292.2	4993.2	4902.5	4846.3	4805.1	4683.0
50°	5170.8	5209.0	5295.9	5463.8	5729.7	5761.2	5492.2	5390.3	5321.4	5246.5	5066.6
52.5°	5121.3	5189.5	5306.4	5588.9	5974.8	6137.4	5971.0	5881.8	5803.2	5681.0	5414.3
55°	4829.9	4898.0	5137.1	5587.4	6096.9	6401.1	6423.6	6383.9	6295.5	6102.9	5695.3
57.5°	4215.5	4316.6	4695.0	5397.1	6094.6	6628.1	6867.2	6895.6	6796.7	6521.0	5916.3
60°	3364.3	3501.4	3962.9	4975.2	5906.6	6751.0	7256.0	7398.4	7293.5	6933.1	6095.4
62.5°	2347.5	2506.3	2943.2	4314.4	5476.5	6662.6	7540.0	7803.0	7723.6	7301.7	6164.3
65°	1431.9	1482.8	1835.0	3395.0	4745.2	6292.5	7627.7	8021.8	7995.6	7527.3	6062.4
67.5°	953.8	996.5	1097.7	2328.0	3683.5	5552.9	7417.9	7983.6	7991.1	7490.6	5689.3
70°	574.7	611.4	677.3	1353.9	2387.2	4395.3	6768.2	7496.5	7540.0	6999.8	4982.0
72.5°	236.8	261.5	321.4	613.7	1236.3	2789.6	5389.6	6436.3	6537.5	5885.6	3823.6
75°	134.1	146.9	188.8	308.0	536.5	1300.0	3264.6	4569.1	4718.2	4056.6	2300.3
77.5°	89.2	95.2	122.1	199.3	302.0	443.6	1395.2	2380.5	2665.2	2215.6	995.8
80°	59.9	65.2	83.9	133.4	196.3	190.3	444.3	881.9	1085.0	761.3	242.8
82.5°	40.5	41.2	59.9	87.7	124.4	92.2	131.1	274.2	344.7	220.3	92.2
85°	23.2	22.5	44.2	51.0	55.4	38.2	39.7	82.4	107.9	92.9	52.4
87.5°	3.0	4.5	17.2	13.5	7.5	8.2	8.2	14.2	21.0	22.5	11.2
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°	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0
2.5°	1301.5	1300.8	1298.5	1296.3	1291.0	1288.0	1289.5	1288.0	1287.3	1288.0	1291.0
5°	1311.2	1309.0	1303.0	1295.5	1285.0	1272.3	1264.0	1252.0	1240.8	1234.1	1235.6
7.5°	1337.5	1335.2	1327.0	1306.0	1272.3	1219.1	1170.4	1127.7	1095.4	1076.7	1077.5
10°	1379.4	1375.7	1362.9	1316.5	1228.1	1111.9	1015.3	935.1	882.7	857.9	855.7
12.5°	1428.9	1424.4	1401.9	1306.7	1144.2	962.8	829.5	740.3	691.6	669.9	667.6
15°	1487.3	1481.3	1437.1	1260.3	1022.0	798.0	675.9	609.2	577.7	558.2	559.0
17.5°	1560.0	1549.5	1463.3	1190.6	889.4	672.1	581.4	531.2	503.5	484.8	483.3
20°	1654.4	1637.2	1484.3	1107.4	767.3	592.7	517.8	475.8	454.8	438.3	435.3
22.5°	1786.3	1761.6	1509.8	1017.5	681.1	538.0	470.5	439.8	422.6	403.9	400.9
25°	1949.6	1920.4	1541.3	934.4	621.9	490.8	436.1	410.6	390.4	368.6	366.4
27.5°	2178.2	2125.7	1578.7	866.2	571.0	450.3	404.6	376.1	352.9	334.9	331.2
30°	2432.9	2346.7	1611.7	825.0	524.5	412.9	363.4	334.9	313.2	300.5	298.2
32.5°	2674.2	2557.3	1633.4	807.0	482.5	370.1	318.4	287.7	271.2	267.5	269.7
35°	2902.0	2747.6	1631.2	789.7	445.1	327.4	274.2	242.8	230.0	232.3	232.3
37.5°	3164.2	2950.7	1615.4	762.8	414.4	288.5	236.0	208.3	197.1	197.8	200.8
40°	3469.2	3185.2	1605.7	711.8	380.6	252.5	204.6	182.1	173.8	170.8	170.1
42.5°	3794.4	3412.2	1607.2	654.1	338.7	220.3	182.8	164.1	156.6	154.4	153.6
45°	4121.0	3628.8	1609.5	594.2	294.5	195.6	167.1	151.4	146.9	143.9	143.9
47.5°	4428.2	3813.1	1567.5	529.7	251.0	176.8	154.4	143.9	140.1	136.4	136.4
50°	4714.5	3936.0	1466.3	454.8	216.5	161.8	144.6	137.1	133.4	129.6	129.6
52.5°	4937.0	3955.5	1299.3	377.6	192.6	150.6	138.6	131.9	127.4	123.6	122.9
55°	5035.9	3833.3	1061.7	305.7	173.8	140.9	132.6	125.9	120.6	116.9	116.1
57.5°	5010.4	3576.3	828.0	245.8	155.9	131.1	125.1	120.6	114.6	108.6	107.9
60°	4885.3	3232.4	624.2	204.6	139.4	120.6	116.9	113.1	104.9	95.9	94.4
62.5°	4668.8	2800.1	445.1	169.3	121.4	108.6	107.1	104.1	92.2	75.7	74.2
65°	4337.6	2274.8	299.7	140.9	104.1	95.2	95.9	90.7	74.9	56.2	54.7
67.5°	3853.5	1663.4	191.8	115.4	86.9	79.4	80.2	77.2	63.7	48.0	45.7
70°	3236.9	1101.4	125.1	87.7	69.7	61.4	65.9	66.7	53.9	39.0	37.5
72.5°	2373.0	650.4	87.7	65.2	51.0	42.7	53.9	55.4	43.5	29.2	27.7
75°	1352.5	308.7	65.9	47.2	31.5	30.0	42.0	42.0	30.0	19.5	18.0
77.5°	568.0	128.9	46.5	30.7	18.0	17.2	28.5	26.2	15.0	9.0	9.0
80°	164.1	57.7	24.7	15.0	7.5	6.7	11.2	8.2	3.7	1.5	1.5
82.5°	64.4	25.5	9.7	6.0	3.0	3.0	1.5	0.0	0.0	0.0	0.0
85°	38.2	10.5	4.5	2.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.7	2.2	1.5	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)