

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: P882618

Luminaire Tested: **NAV-SB2C-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882618
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-SB2C-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA 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: 9726 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

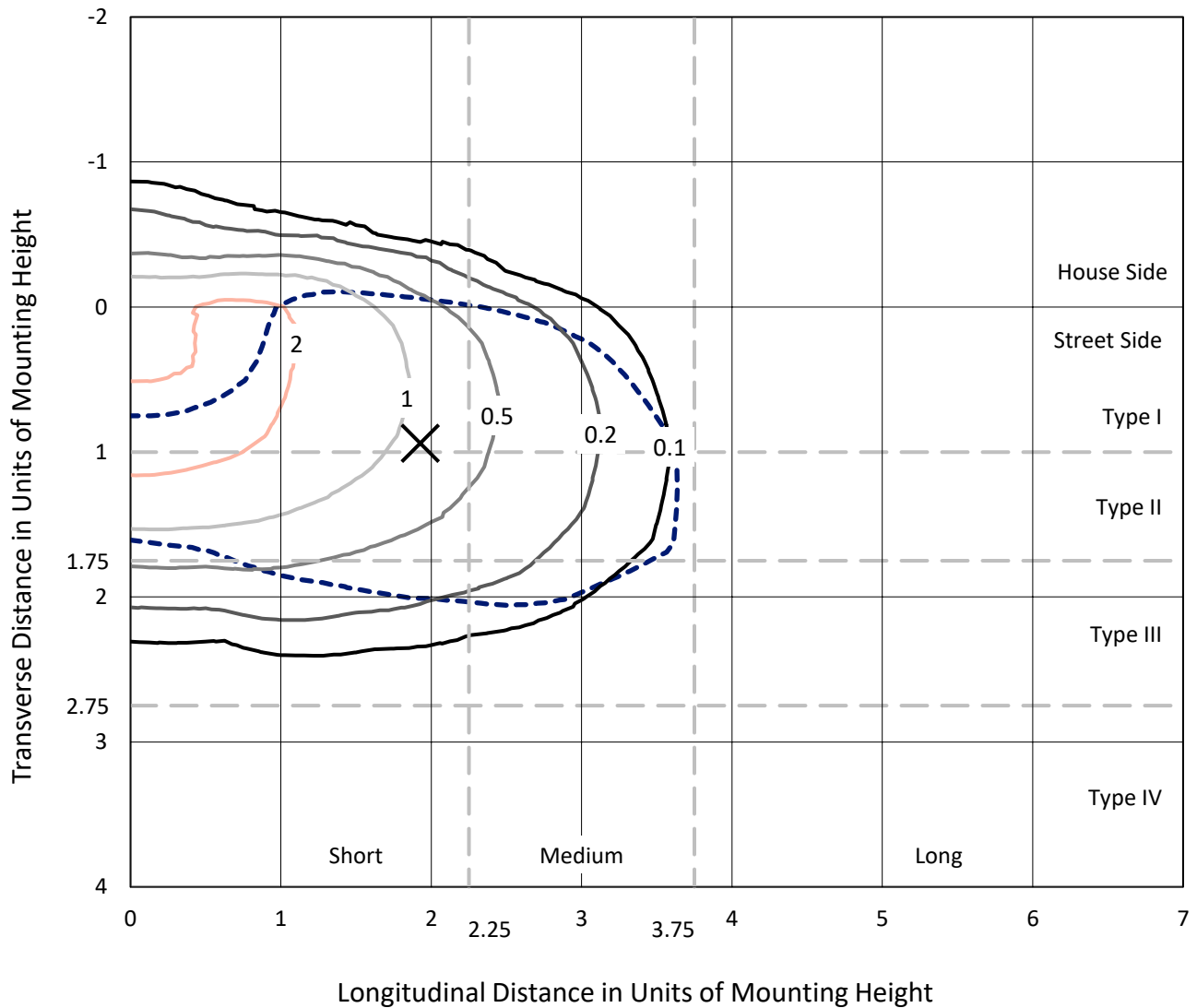
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

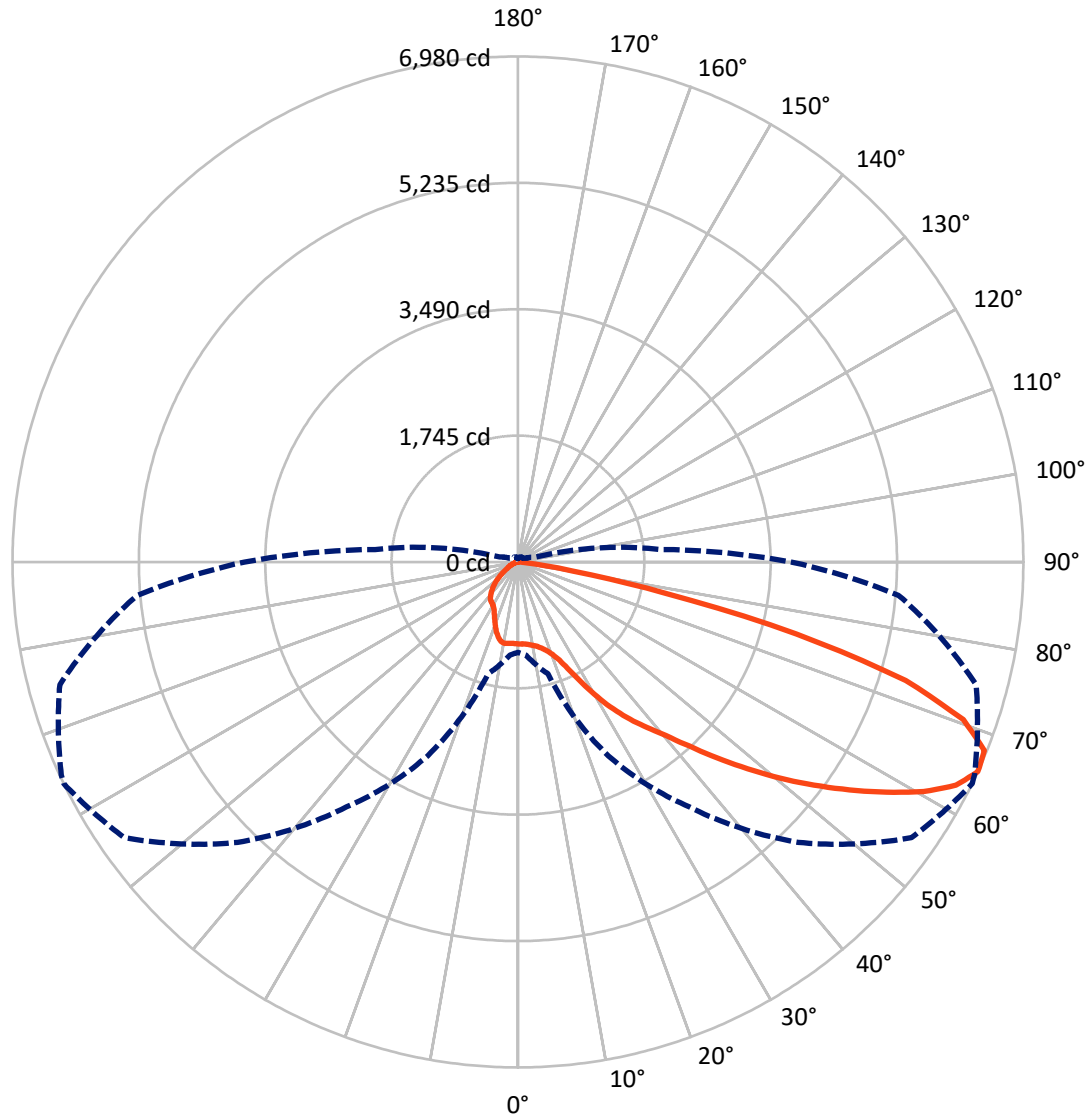
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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	1300.7	0.0	1300.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	8425.3	0.0	8425.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	9726.0	0.0	9726.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	1.1
10°-20°	283.1	2.9
20°-30°	536.4	5.5
30°-40°	1085.4	11.2
40°-50°	1849.0	19.0
50°-60°	2514.5	25.9
60°-70°	2361.3	24.3
70°-80°	946.0	9.7
80°-90°	45.8	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°	9726.0	100.0
0°-180°	9726.0	100.0

Coefficient of Utilization



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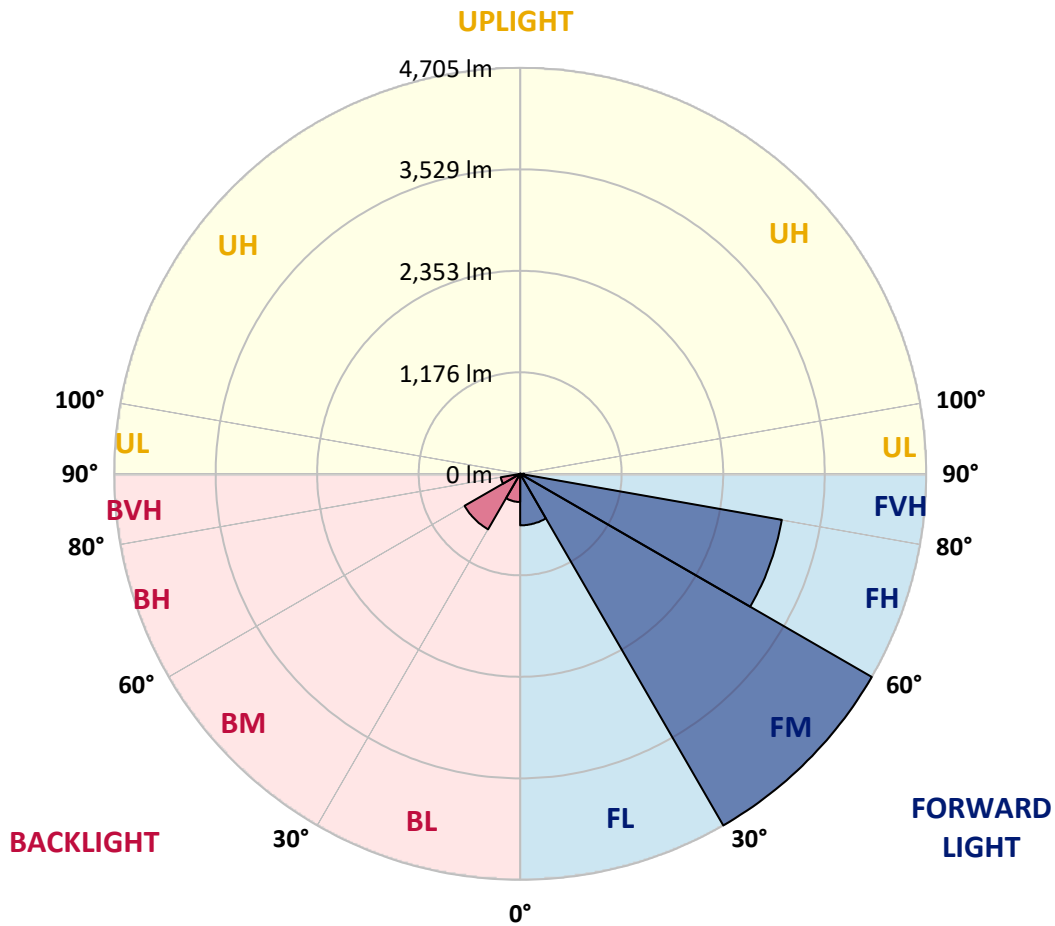
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	597.3	6.1			
FM (30°-60°)	4705.4	48.4			
FH (60°-80°)	3079.0	31.7			G2/5000
FVH (80°-90°)	43.6	0.4			G1/100
BL (0°-30°)	326.6	3.4	B1/500		
BM (30°-60°)	743.6	7.6	B1/1000		
BH (60°-80°)	228.3	2.3	B1/500		G1/500
BVH (80°-90°)	2.2	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°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2
2.5°	1127.3	1135.1	1133.2	1131.2	1130.6	1131.9	1132.5	1131.9	1131.9	1131.9	1132.5
5°	1105.8	1112.3	1112.3	1116.9	1123.4	1131.2	1137.1	1138.4	1139.7	1141.7	1141.0
7.5°	1064.7	1069.9	1073.9	1088.9	1105.2	1126.0	1143.6	1152.8	1154.1	1161.2	1163.8
10°	1036.7	1043.2	1049.7	1065.4	1088.9	1120.2	1150.1	1172.3	1175.6	1192.5	1200.3
12.5°	1035.4	1041.9	1050.4	1067.3	1094.7	1128.0	1164.5	1196.4	1202.3	1227.1	1243.4
15°	1049.1	1056.9	1064.7	1085.6	1114.9	1155.4	1194.5	1234.3	1240.1	1275.3	1292.9
17.5°	1077.1	1087.6	1093.4	1114.3	1145.6	1190.6	1242.1	1287.7	1292.9	1334.0	1356.2
20°	1132.5	1144.9	1146.9	1163.8	1194.5	1242.7	1304.0	1360.7	1367.3	1414.2	1439.0
22.5°	1247.3	1264.9	1249.2	1257.7	1285.1	1333.4	1399.9	1471.6	1480.7	1534.2	1556.3
25°	1449.4	1474.2	1433.8	1419.4	1431.2	1481.4	1564.8	1655.4	1665.9	1708.9	1720.0
27.5°	1846.5	1814.5	1753.3	1693.3	1658.1	1686.7	1780.6	1892.8	1905.8	1947.5	1934.5
30°	2282.7	2254.6	2171.8	2038.8	1955.4	1950.8	2037.5	2162.7	2177.7	2217.5	2177.7
32.5°	2719.5	2692.8	2602.8	2439.2	2294.4	2222.7	2282.7	2421.6	2429.4	2454.8	2396.1
35°	3149.2	3121.8	3031.8	2864.3	2686.3	2523.3	2511.5	2668.0	2670.6	2697.4	2610.0
37.5°	3581.5	3558.7	3462.8	3298.5	3123.1	2898.2	2789.3	2901.4	2904.7	2930.8	2840.1
40°	3889.9	3899.7	3833.8	3706.7	3556.1	3310.2	3101.0	3149.9	3130.3	3174.0	3119.9
42.5°	4154.6	4174.2	4116.8	4052.9	3965.5	3749.0	3486.9	3478.5	3447.2	3470.6	3414.6
45°	4383.5	4399.8	4348.2	4333.2	4331.3	4179.4	3908.8	3857.9	3814.2	3809.7	3742.5
47.5°	4467.6	4498.9	4521.0	4571.2	4669.0	4605.1	4345.0	4266.1	4217.2	4181.3	4075.1
50°	4499.5	4532.8	4608.4	4754.4	4985.9	5013.3	4779.2	4690.5	4630.6	4565.4	4408.9
52.5°	4456.5	4515.8	4617.5	4863.3	5199.1	5340.6	5195.9	5118.3	5049.8	4943.5	4711.4
55°	4202.8	4262.2	4470.2	4862.0	5305.4	5570.1	5589.7	5555.1	5478.2	5310.6	4955.9
57.5°	3668.2	3756.2	4085.5	4696.4	5303.4	5767.7	5975.7	6000.4	5914.4	5674.4	5148.3
60°	2927.5	3046.8	3448.5	4329.3	5139.8	5874.6	6314.1	6437.9	6346.7	6033.0	5304.1
62.5°	2042.7	2181.0	2561.1	3754.3	4765.5	5797.7	6561.2	6790.0	6720.9	6353.8	5364.1
65°	1246.0	1290.3	1596.8	2954.3	4129.2	5475.6	6637.4	6980.4	6957.6	6550.1	5275.4
67.5°	830.0	867.2	955.2	2025.8	3205.3	4832.0	6454.9	6947.2	6953.7	6518.1	4950.7
70°	500.1	532.0	589.4	1178.2	2077.3	3824.7	5889.6	6523.3	6561.2	6091.1	4335.2
72.5°	206.0	227.6	279.7	534.0	1075.8	2427.4	4689.9	5600.8	5688.8	5121.5	3327.2
75°	116.7	127.8	164.3	268.0	466.8	1131.2	2840.8	3975.9	4105.7	3530.0	2001.7
77.5°	77.6	82.8	106.3	173.4	262.8	386.0	1214.0	2071.4	2319.2	1928.0	866.5
80°	52.2	56.7	73.0	116.1	170.8	165.6	386.6	767.4	944.1	662.4	211.3
82.5°	35.2	35.9	52.2	76.3	108.2	80.2	114.1	238.6	299.9	191.7	80.2
85°	20.2	19.6	38.5	44.3	48.2	33.3	34.6	71.7	93.9	80.8	45.6
87.5°	2.6	3.9	15.0	11.7	6.5	7.2	7.2	12.4	18.3	19.6	9.8
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°	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2	1131.2
2.5°	1132.5	1131.9	1129.9	1128.0	1123.4	1120.8	1122.1	1120.8	1120.2	1120.8	1123.4
5°	1141.0	1139.1	1133.8	1127.3	1118.2	1107.1	1099.9	1089.5	1079.7	1073.9	1075.2
7.5°	1163.8	1161.9	1154.7	1136.5	1107.1	1060.8	1018.4	981.3	953.2	936.9	937.6
10°	1200.3	1197.1	1186.0	1145.6	1068.6	967.6	883.5	813.7	768.1	746.5	744.6
12.5°	1243.4	1239.5	1219.9	1137.1	995.6	837.8	721.8	644.2	601.8	582.9	580.9
15°	1294.2	1289.0	1250.6	1096.7	889.3	694.4	588.1	530.1	502.7	485.7	486.4
17.5°	1357.5	1348.4	1273.4	1036.0	773.9	584.9	506.0	462.3	438.1	421.8	420.5
20°	1439.6	1424.6	1291.6	963.7	667.7	515.7	450.5	414.0	395.8	381.4	378.8
22.5°	1554.4	1532.9	1313.8	885.4	592.7	468.1	409.5	382.7	367.7	351.4	348.8
25°	1696.5	1671.1	1341.2	813.1	541.2	427.1	379.5	357.3	339.7	320.8	318.8
27.5°	1895.4	1849.7	1373.8	753.7	496.8	391.9	352.1	327.3	307.1	291.4	288.2
30°	2117.1	2042.1	1402.5	717.9	456.4	359.3	316.2	291.4	272.5	261.5	259.5
32.5°	2327.0	2225.3	1421.4	702.2	419.9	322.1	277.1	250.4	236.0	232.8	234.7
35°	2525.2	2390.9	1419.4	687.2	387.3	284.9	238.6	211.3	200.2	202.1	202.1
37.5°	2753.4	2567.6	1405.7	663.7	360.6	251.0	205.4	181.3	171.5	172.1	174.7
40°	3018.8	2771.7	1397.3	619.4	331.2	219.7	178.0	158.4	151.3	148.7	148.0
42.5°	3301.8	2969.2	1398.6	569.2	294.7	191.7	159.1	142.8	136.3	134.3	133.7
45°	3586.0	3157.7	1400.5	517.0	256.2	170.2	145.4	131.7	127.8	125.2	125.2
47.5°	3853.4	3318.1	1364.0	461.0	218.4	153.9	134.3	125.2	121.9	118.7	118.7
50°	4102.4	3425.0	1276.0	395.8	188.4	140.8	125.8	119.3	116.1	112.8	112.8
52.5°	4296.1	3442.0	1130.6	328.6	167.6	131.1	120.6	114.8	110.8	107.6	106.9
55°	4382.1	3335.7	923.9	266.0	151.3	122.6	115.4	109.5	105.0	101.7	101.1
57.5°	4360.0	3112.0	720.5	213.9	135.6	114.1	108.9	105.0	99.8	94.5	93.9
60°	4251.1	2812.8	543.1	178.0	121.3	105.0	101.7	98.5	91.3	83.5	82.2
62.5°	4062.7	2436.6	387.3	147.4	105.6	94.5	93.2	90.6	80.2	65.9	64.5
65°	3774.5	1979.5	260.8	122.6	90.6	82.8	83.5	78.9	65.2	48.9	47.6
67.5°	3353.3	1447.5	166.9	100.4	75.6	69.1	69.8	67.2	55.4	41.7	39.8
70°	2816.7	958.5	108.9	76.3	60.6	53.5	57.4	58.0	46.9	33.9	32.6
72.5°	2064.9	565.9	76.3	56.7	44.3	37.2	46.9	48.2	37.8	25.4	24.1
75°	1176.9	268.6	57.4	41.1	27.4	26.1	36.5	36.5	26.1	17.0	15.6
77.5°	494.2	112.1	40.4	26.7	15.6	15.0	24.8	22.8	13.0	7.8	7.8
80°	142.8	50.2	21.5	13.0	6.5	5.9	9.8	7.2	3.3	1.3	1.3
82.5°	56.1	22.2	8.5	5.2	2.6	2.6	1.3	0.0	0.0	0.0	0.0
85°	33.3	9.1	3.9	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	2.0	1.3	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)