

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: P882578

Luminaire Tested: **NAV-SB2C-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882578
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-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 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: 11971 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

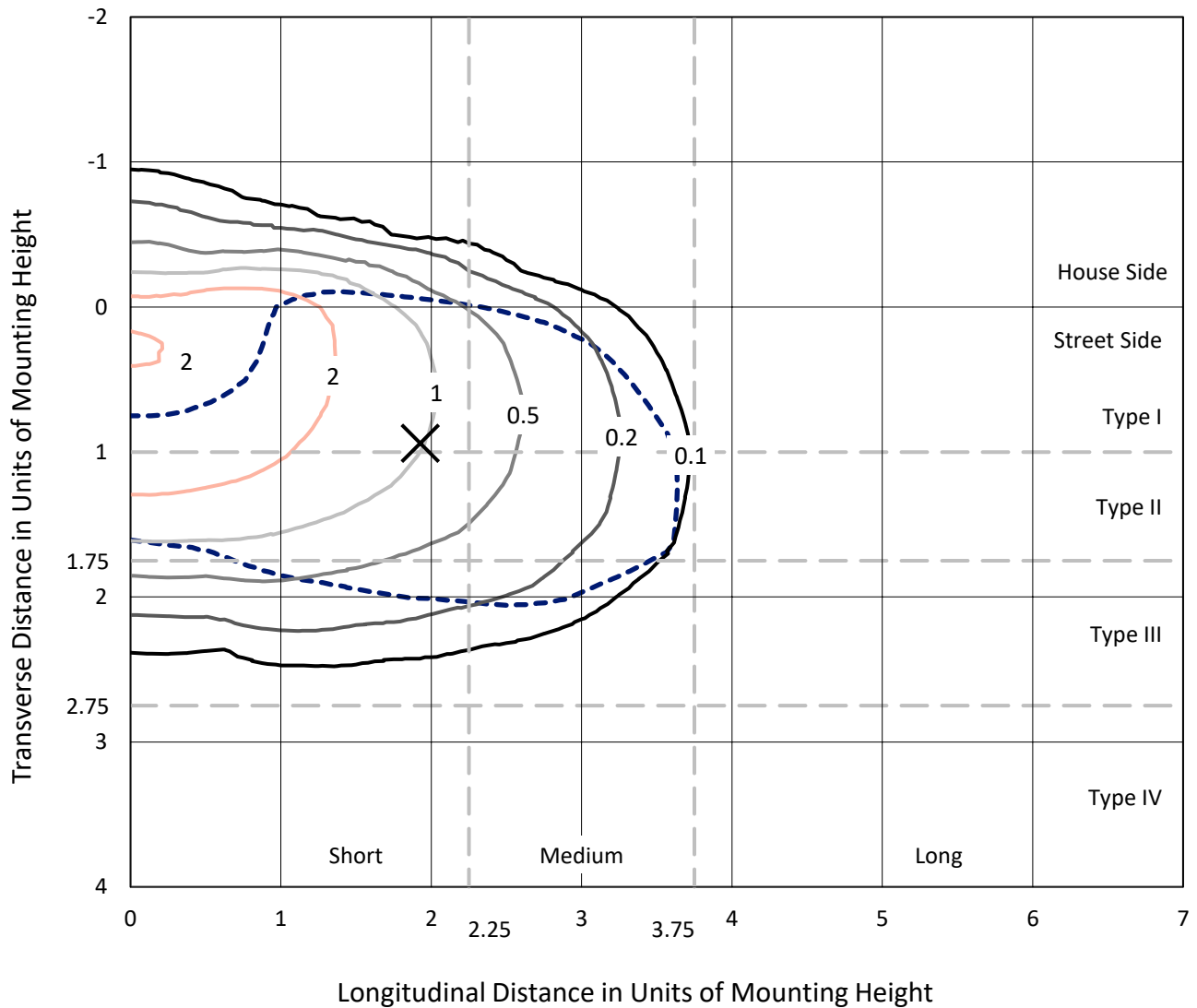
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

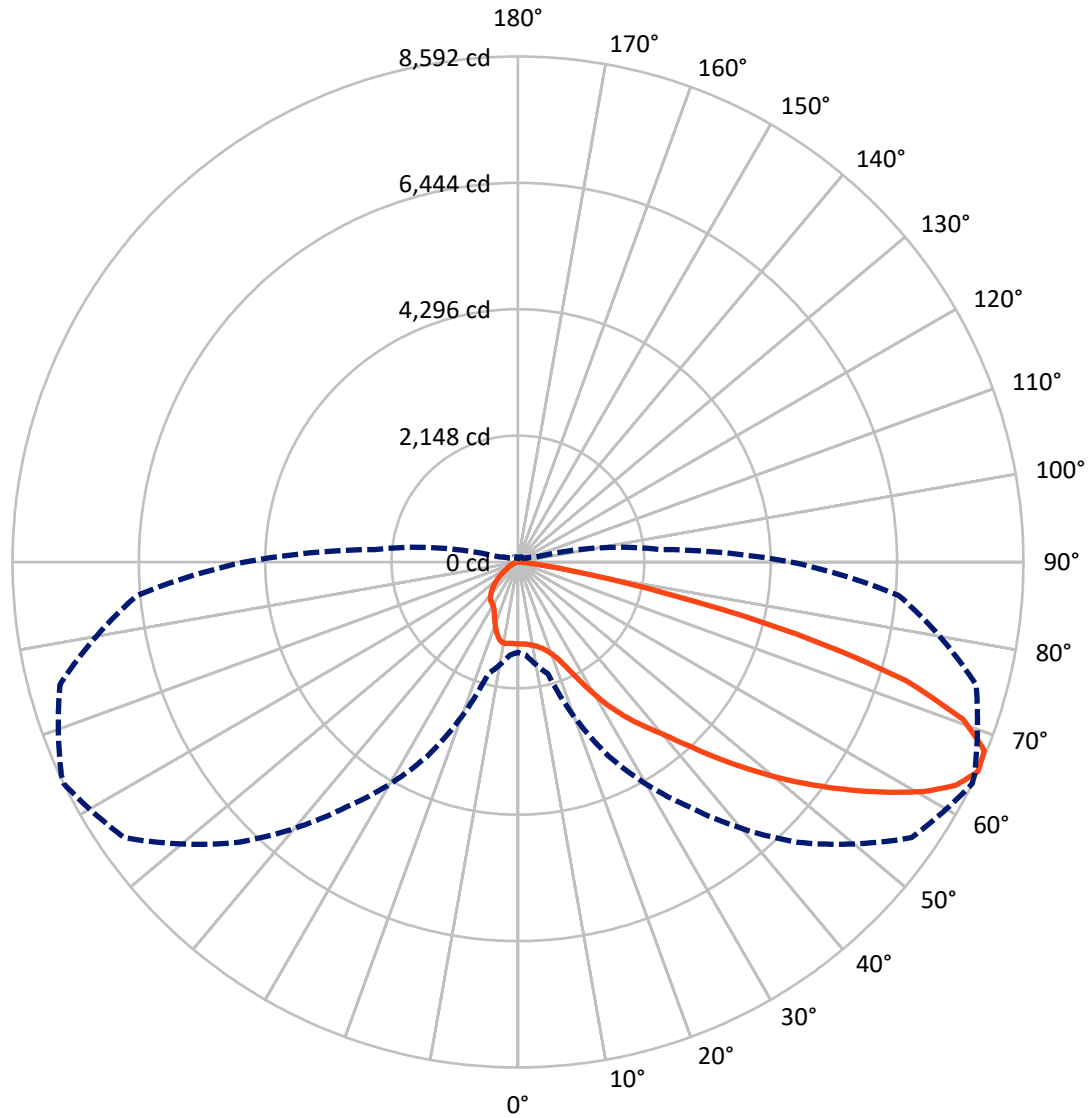
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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	1600.9	0.0	1600.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	10370.1	0.0	10370.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	11971.0	0.0	11971.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	1.1
10°-20°	348.4	2.9
20°-30°	660.2	5.5
30°-40°	1336.0	11.2
40°-50°	2275.8	19.0
50°-60°	3095.0	25.9
60°-70°	2906.3	24.3
70°-80°	1164.4	9.7
80°-90°	56.4	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°	11971.0	100.0
0°-180°	11971.0	100.0

Coefficient of Utilization



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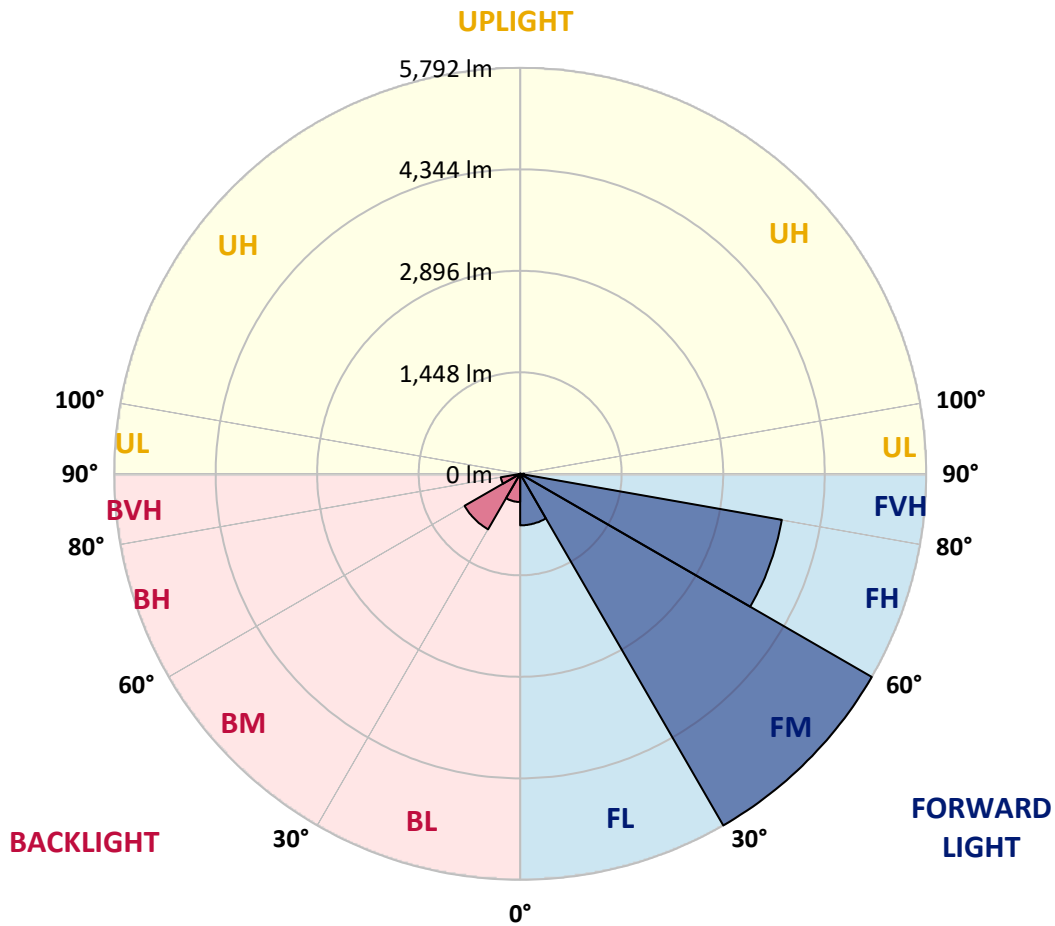
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	735.2	6.1			
FM (30°-60°)	5791.6	48.4			
FH (60°-80°)	3789.7	31.7			G2/5000
FVH (80°-90°)	53.7	0.4			G1/100
BL (0°-30°)	401.9	3.4	B1/500		
BM (30°-60°)	915.2	7.6	B1/1000		
BH (60°-80°)	281.0	2.3	B1/500		G1/500
BVH (80°-90°)	2.8	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°	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4
2.5°	1387.5	1397.2	1394.8	1392.4	1391.5	1393.2	1394.0	1393.2	1393.2	1393.2	1394.0
5°	1361.1	1369.1	1369.1	1374.7	1382.7	1392.4	1399.6	1401.2	1402.8	1405.2	1404.4
7.5°	1310.5	1316.9	1321.7	1340.2	1360.3	1385.9	1407.6	1418.8	1420.4	1429.3	1432.5
10°	1276.0	1284.0	1292.0	1311.3	1340.2	1378.7	1415.6	1442.9	1446.9	1467.8	1477.4
12.5°	1274.4	1282.4	1292.8	1313.7	1347.4	1388.3	1433.3	1472.6	1479.8	1510.3	1530.4
15°	1291.2	1300.9	1310.5	1336.2	1372.3	1422.0	1470.2	1519.1	1526.4	1569.7	1591.4
17.5°	1325.7	1338.6	1345.8	1371.5	1410.0	1465.4	1528.8	1585.0	1591.4	1641.9	1669.2
20°	1394.0	1409.2	1411.6	1432.5	1470.2	1529.6	1605.0	1674.8	1682.9	1740.6	1771.1
22.5°	1535.2	1556.9	1537.6	1548.0	1581.7	1641.1	1723.0	1811.3	1822.5	1888.3	1915.6
25°	1784.0	1814.5	1764.7	1747.1	1761.5	1823.3	1926.0	2037.6	2050.4	2103.4	2117.0
27.5°	2272.7	2233.4	2157.9	2084.1	2040.8	2076.1	2191.6	2329.7	2345.7	2397.1	2381.0
30°	2809.6	2775.1	2673.2	2509.4	2406.7	2401.1	2507.8	2661.9	2680.4	2729.3	2680.4
32.5°	3347.3	3314.4	3203.6	3002.2	2824.0	2735.8	2809.6	2980.5	2990.1	3021.4	2949.2
35°	3876.1	3842.4	3731.7	3525.4	3306.3	3105.7	3091.3	3283.9	3287.1	3320.0	3212.4
37.5°	4408.2	4380.1	4262.1	4059.9	3844.0	3567.1	3433.1	3571.2	3575.2	3607.3	3495.7
40°	4787.8	4799.8	4718.7	4562.3	4376.9	4074.3	3816.7	3876.9	3852.8	3906.6	3840.0
42.5°	5113.6	5137.7	5067.0	4988.4	4880.9	4614.4	4291.8	4281.4	4242.9	4271.8	4202.7
45°	5395.3	5415.3	5351.9	5333.5	5331.1	5144.1	4811.0	4748.4	4694.7	4689.1	4606.4
47.5°	5498.8	5537.3	5564.6	5626.4	5746.8	5668.1	5347.9	5250.8	5190.6	5146.5	5015.7
50°	5538.1	5579.0	5672.1	5851.9	6136.8	6170.5	5882.4	5773.2	5699.4	5619.2	5426.6
52.5°	5485.1	5558.2	5683.4	5985.9	6399.2	6573.3	6395.2	6299.7	6215.4	6084.6	5798.9
55°	5173.0	5246.0	5502.0	5984.3	6530.0	6855.8	6879.9	6837.4	6742.7	6536.4	6099.9
57.5°	4514.9	4623.2	5028.5	5780.5	6527.6	7099.0	7355.0	7385.5	7279.6	6984.2	6336.6
60°	3603.3	3750.1	4244.5	5328.7	6326.2	7230.6	7771.5	7924.0	7811.6	7425.6	6528.4
62.5°	2514.3	2684.4	3152.3	4620.8	5865.5	7135.9	8075.6	8357.3	8272.3	7820.4	6602.2
65°	1533.6	1588.2	1965.3	3636.2	5082.3	6739.5	8169.5	8591.7	8563.6	8062.0	6493.1
67.5°	1021.6	1067.3	1175.7	2493.4	3945.1	5947.4	7944.8	8550.7	8558.7	8022.7	6093.4
70°	615.5	654.8	725.5	1450.1	2556.8	4707.5	7249.1	8029.1	8075.6	7497.0	5335.9
72.5°	253.6	280.1	344.3	657.3	1324.1	2987.7	5772.4	6893.5	7001.9	6303.7	4095.2
75°	143.6	157.3	202.2	329.8	574.6	1392.4	3496.5	4893.7	5053.4	4344.8	2463.7
77.5°	95.5	101.9	130.8	213.5	323.4	475.1	1494.3	2549.6	2854.5	2373.0	1066.5
80°	64.2	69.8	89.9	142.8	210.3	203.8	475.9	944.6	1162.0	815.3	260.0
82.5°	43.3	44.1	64.2	93.9	133.2	98.7	140.4	293.7	369.2	235.9	98.7
85°	24.9	24.1	47.3	54.6	59.4	40.9	42.5	88.3	115.6	99.5	56.2
87.5°	3.2	4.8	18.5	14.4	8.0	8.8	8.8	15.2	22.5	24.1	12.0
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°	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4	1392.4
2.5°	1394.0	1393.2	1390.7	1388.3	1382.7	1379.5	1381.1	1379.5	1378.7	1379.5	1382.7
5°	1404.4	1402.0	1395.6	1387.5	1376.3	1362.7	1353.8	1341.0	1329.0	1321.7	1323.3
7.5°	1432.5	1430.1	1421.2	1398.8	1362.7	1305.7	1253.5	1207.8	1173.3	1153.2	1154.0
10°	1477.4	1473.4	1459.8	1410.0	1315.3	1190.9	1087.4	1001.5	945.4	918.9	916.5
12.5°	1530.4	1525.6	1501.5	1399.6	1225.4	1031.2	888.4	792.9	740.7	717.4	715.0
15°	1593.0	1586.6	1539.2	1349.8	1094.6	854.7	723.9	652.4	618.7	597.9	598.7
17.5°	1670.8	1659.6	1567.3	1275.2	952.6	719.8	622.7	569.0	539.3	519.2	517.6
20°	1771.9	1753.5	1589.8	1186.1	821.8	634.8	554.5	509.6	487.1	469.5	466.3
22.5°	1913.2	1886.7	1617.1	1089.8	729.5	576.2	504.0	471.1	452.6	432.6	429.3
25°	2088.1	2056.8	1650.8	1000.7	666.1	525.6	467.1	439.8	418.1	394.8	392.4
27.5°	2332.9	2276.7	1690.9	927.7	611.5	482.3	433.4	402.9	378.0	358.7	354.7
30°	2605.7	2513.5	1726.2	883.6	561.8	442.2	389.2	358.7	335.4	321.8	319.4
32.5°	2864.2	2739.0	1749.5	864.3	516.8	396.4	341.1	308.2	290.5	286.5	288.9
35°	3108.1	2942.8	1747.1	845.8	476.7	350.7	293.7	260.0	246.4	248.8	248.8
37.5°	3389.0	3160.3	1730.2	817.0	443.8	309.0	252.8	223.1	211.1	211.9	215.1
40°	3715.6	3411.5	1719.8	762.4	407.7	270.4	219.1	195.0	186.2	183.0	182.2
42.5°	4063.9	3654.6	1721.4	700.6	362.7	235.9	195.8	175.7	167.7	165.3	164.5
45°	4413.8	3886.5	1723.8	636.4	315.4	209.5	179.0	162.1	157.3	154.1	154.1
47.5°	4742.8	4084.0	1678.8	567.4	268.8	189.4	165.3	154.1	150.1	146.1	146.1
50°	5049.4	4215.6	1570.5	487.1	231.9	173.3	154.9	146.9	142.8	138.8	138.8
52.5°	5287.7	4236.4	1391.5	404.5	206.2	161.3	148.5	141.2	136.4	132.4	131.6
55°	5393.7	4105.6	1137.2	327.4	186.2	150.9	142.0	134.8	129.2	125.2	124.4
57.5°	5366.4	3830.4	886.8	263.2	166.9	140.4	134.0	129.2	122.8	116.4	115.6
60°	5232.4	3462.0	668.5	219.1	149.3	129.2	125.2	121.2	112.4	102.7	101.1
62.5°	5000.4	2999.0	476.7	181.4	130.0	116.4	114.8	111.5	98.7	81.1	79.4
65°	4645.7	2436.4	321.0	150.9	111.5	101.9	102.7	97.1	80.3	60.2	58.6
67.5°	4127.3	1781.6	205.4	123.6	93.1	85.1	85.9	82.7	68.2	51.4	49.0
70°	3466.8	1179.7	134.0	93.9	74.6	65.8	70.6	71.4	57.8	41.7	40.1
72.5°	2541.5	696.6	93.9	69.8	54.6	45.7	57.8	59.4	46.5	31.3	29.7
75°	1448.5	330.6	70.6	50.6	33.7	32.1	44.9	44.9	32.1	20.9	19.3
77.5°	608.3	138.0	49.8	32.9	19.3	18.5	30.5	28.1	16.1	9.6	9.6
80°	175.7	61.8	26.5	16.1	8.0	7.2	12.0	8.8	4.0	1.6	1.6
82.5°	69.0	27.3	10.4	6.4	3.2	3.2	1.6	0.0	0.0	0.0	0.0
85°	40.9	11.2	4.8	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.4	2.4	1.6	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)