

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: P959768

Luminaire Tested: **NAV-SB1B-727-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959768
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4200.4 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

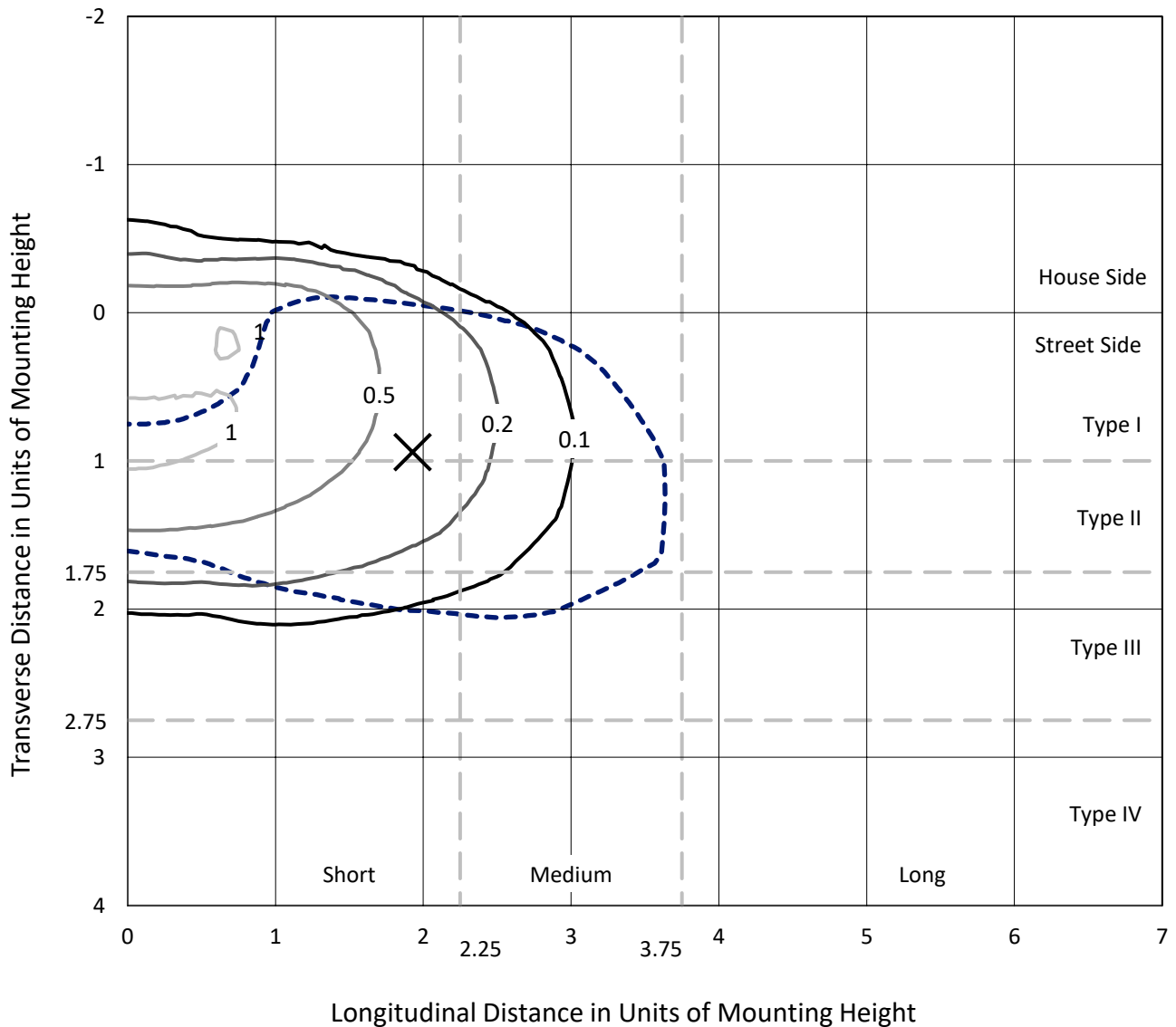
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

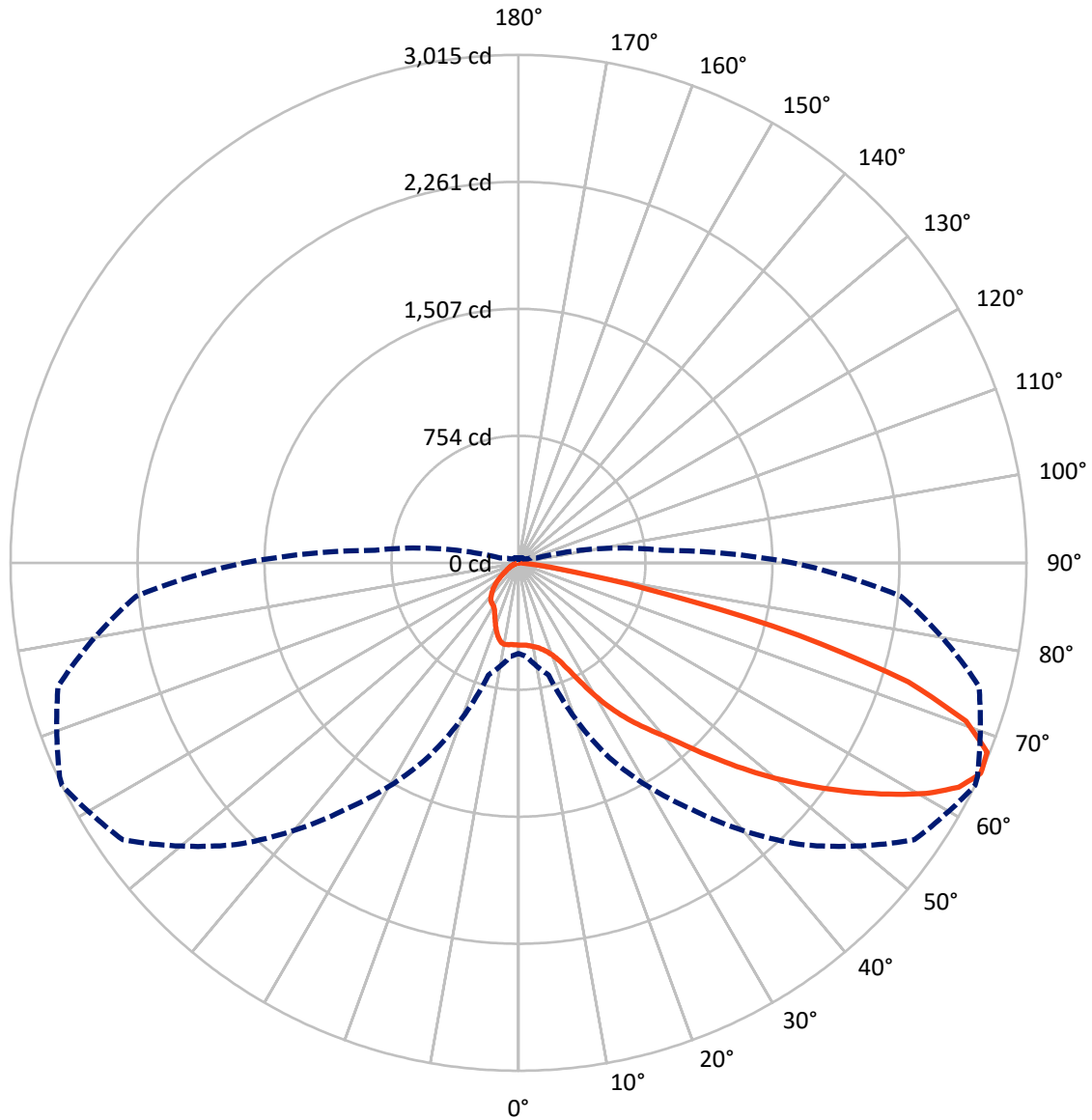
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 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	561.7	0.0	561.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	3638.7	0.0	3638.7
	% Fixture	86.6	0.0	86.6
Total	Lumens	4200.4	0.0	4200.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.1	1.1
10°-20°	122.3	2.9
20°-30°	231.7	5.5
30°-40°	468.8	11.2
40°-50°	798.6	19.0
50°-60°	1086.0	25.9
60°-70°	1019.8	24.3
70°-80°	408.6	9.7
80°-90°	19.8	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°	4200.4	100.0
0°-180°	4200.4	100.0

Coefficient of Utilization



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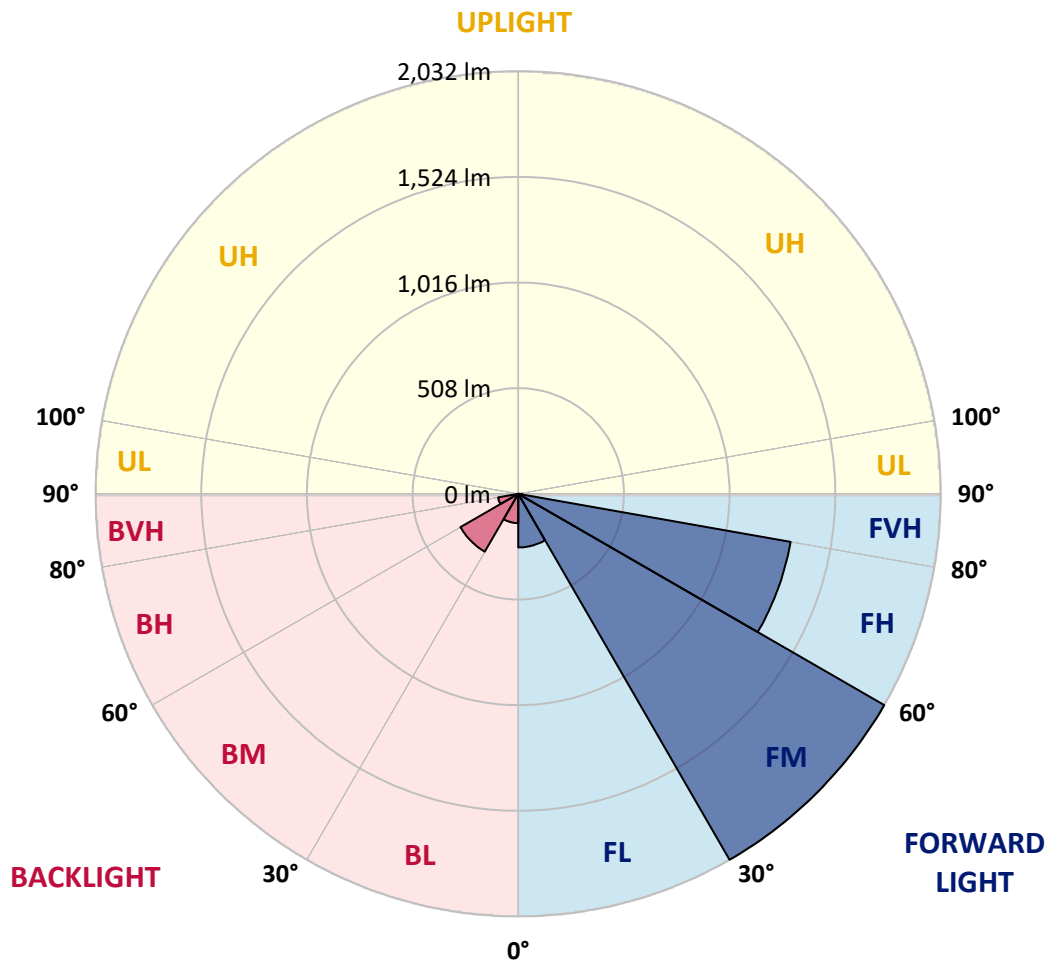
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	258.0	6.1			
FM (30°-60°)	2032.2	48.4			
FH (60°-80°)	1329.8	31.7			G1/1800
FVH (80°-90°)	18.8	0.4			G1/100
BL (0°-30°)	141.0	3.4	B1/500		
BM (30°-60°)	321.1	7.6	B1/1000		
BH (60°-80°)	98.6	2.3	B0/110		G0/110
BVH (80°-90°)	1.0	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-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5
2.5°	486.9	490.3	489.4	488.5	488.3	488.8	489.1	488.8	488.8	488.8	489.1
5°	477.5	480.4	480.4	482.4	485.1	488.5	491.1	491.7	492.2	493.0	492.8
7.5°	459.8	462.1	463.8	470.3	477.3	486.3	493.9	497.8	498.5	501.5	502.7
10°	447.7	450.6	453.4	460.1	470.3	483.8	496.7	506.2	507.7	515.1	518.4
12.5°	447.2	450.0	453.7	460.9	472.8	487.2	503.0	516.7	519.3	529.9	537.0
15°	453.0	456.4	459.8	468.8	481.5	499.0	515.9	533.0	535.6	550.8	558.4
17.5°	465.1	469.7	472.2	481.2	494.8	514.1	536.4	556.2	558.4	576.2	585.7
20°	489.1	494.5	495.3	502.7	515.9	536.7	563.1	587.6	590.5	610.8	621.5
22.5°	538.6	546.3	539.6	543.1	555.0	575.8	604.5	635.5	639.5	662.6	672.2
25°	626.0	636.6	619.2	613.1	618.1	639.8	675.8	714.9	719.4	738.0	742.8
27.5°	797.4	783.6	757.2	731.2	716.1	728.5	769.1	817.4	823.1	841.1	835.5
30°	985.8	973.7	938.0	880.6	844.5	842.6	880.0	934.0	940.5	957.7	940.5
32.5°	1174.5	1163.0	1124.1	1053.4	990.9	959.9	985.8	1045.8	1049.2	1060.2	1034.8
35°	1360.1	1348.3	1309.4	1237.0	1160.1	1089.8	1084.7	1152.3	1153.4	1164.9	1127.2
37.5°	1546.7	1536.9	1495.5	1424.5	1348.8	1251.6	1204.7	1253.1	1254.5	1265.8	1226.6
40°	1680.0	1684.2	1655.8	1600.8	1535.8	1429.7	1339.3	1360.4	1351.9	1370.7	1347.4
42.5°	1794.3	1802.8	1778.0	1750.4	1712.6	1619.1	1505.9	1502.2	1488.7	1498.9	1474.7
45°	1893.1	1900.1	1877.9	1871.4	1870.6	1805.0	1688.1	1666.1	1647.3	1645.3	1616.3
47.5°	1929.5	1943.0	1952.5	1974.3	2016.5	1988.9	1876.5	1842.4	1821.3	1805.8	1759.9
50°	1943.2	1957.6	1990.2	2053.4	2153.3	2165.1	2064.0	2025.7	1999.9	1971.7	1904.1
52.5°	1924.6	1950.3	1994.2	2100.3	2245.4	2306.5	2243.9	2210.5	2180.9	2135.0	2034.7
55°	1815.1	1840.7	1930.6	2099.8	2291.3	2405.6	2414.1	2399.1	2365.9	2293.5	2140.4
57.5°	1584.2	1622.3	1764.4	2028.3	2290.5	2491.0	2580.7	2591.5	2554.3	2450.7	2223.4
60°	1264.3	1315.9	1489.3	1869.7	2219.7	2537.1	2726.9	2780.4	2741.0	2605.5	2290.8
62.5°	882.2	941.9	1106.1	1621.3	2058.1	2503.9	2833.6	2932.4	2902.6	2744.1	2316.6
65°	538.1	557.3	689.6	1275.9	1783.3	2364.8	2866.6	3014.7	3004.8	2828.8	2278.4
67.5°	358.4	374.5	412.6	874.9	1384.3	2086.9	2787.7	3000.3	3003.1	2815.1	2138.1
70°	216.0	229.8	254.5	508.8	897.2	1651.8	2543.5	2817.3	2833.6	2630.6	1872.3
72.5°	89.0	98.3	120.8	230.6	464.6	1048.4	2025.5	2418.8	2456.8	2211.8	1436.9
75°	50.4	55.1	70.9	115.7	201.6	488.5	1226.9	1717.1	1773.1	1524.5	864.5
77.5°	33.5	35.8	45.9	74.9	113.5	166.7	524.3	894.6	1001.6	832.6	374.2
80°	22.5	24.5	31.6	50.1	73.8	71.5	167.0	331.4	407.7	286.1	91.2
82.5°	15.2	15.5	22.5	32.9	46.7	34.6	49.3	103.0	129.6	82.8	34.6
85°	8.7	8.4	16.6	19.2	20.8	14.3	15.0	31.0	40.6	35.0	19.7
87.5°	1.1	1.6	6.5	5.0	2.8	3.1	3.1	5.3	7.9	8.4	4.2
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°	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5	488.5
2.5°	489.1	488.8	488.0	487.2	485.1	484.0	484.6	484.0	483.8	484.0	485.1
5°	492.8	491.9	489.6	486.9	482.9	478.2	475.1	470.6	466.3	463.8	464.3
7.5°	502.7	501.8	498.7	490.8	478.2	458.2	439.8	423.8	411.6	404.7	404.9
10°	518.4	517.0	512.2	494.8	461.6	417.9	381.5	351.5	331.7	322.5	321.5
12.5°	537.0	535.3	526.8	491.1	430.0	361.8	311.7	278.2	259.9	251.7	250.9
15°	558.9	556.7	540.1	473.7	384.1	299.9	254.0	228.9	217.1	209.8	210.0
17.5°	586.3	582.3	549.9	447.4	334.3	252.6	218.5	199.7	189.2	182.1	181.6
20°	621.8	615.3	557.8	416.2	288.3	222.7	194.5	178.8	171.0	164.7	163.6
22.5°	671.3	662.0	567.4	382.4	255.9	202.1	176.8	165.3	158.8	151.8	150.7
25°	732.7	721.7	579.2	351.2	233.7	184.4	163.9	154.3	146.7	138.6	137.7
27.5°	818.6	798.9	593.3	325.5	214.5	169.2	152.0	141.3	132.6	125.9	124.4
30°	914.3	881.9	605.7	310.1	197.1	155.2	136.5	125.9	117.7	113.0	112.0
32.5°	1005.0	961.0	613.9	303.3	181.3	139.1	119.7	108.1	101.9	100.6	101.4
35°	1090.6	1032.6	613.1	296.8	167.3	123.1	103.0	91.2	86.4	87.3	87.3
37.5°	1189.1	1108.8	607.1	286.7	155.7	108.4	88.7	78.3	74.1	74.3	75.4
40°	1303.8	1197.0	603.4	267.5	143.1	94.9	76.9	68.5	65.3	64.2	64.0
42.5°	1426.0	1282.4	604.0	245.8	127.3	82.8	68.7	61.7	58.8	58.0	57.7
45°	1548.8	1363.8	604.9	223.3	110.7	73.5	62.8	56.9	55.1	54.0	54.0
47.5°	1664.2	1433.1	589.1	199.1	94.3	66.4	58.0	54.0	52.7	51.2	51.2
50°	1771.7	1479.2	551.0	171.0	81.4	60.8	54.3	51.6	50.1	48.7	48.7
52.5°	1855.4	1486.5	488.3	142.0	72.4	56.6	52.1	49.6	47.9	46.4	46.2
55°	1892.6	1440.6	399.0	114.9	65.3	52.9	49.8	47.4	45.3	44.0	43.7
57.5°	1883.0	1344.0	311.2	92.4	58.5	49.3	47.0	45.3	43.0	40.8	40.6
60°	1836.0	1214.7	234.5	76.9	52.4	45.3	44.0	42.5	39.5	36.1	35.5
62.5°	1754.6	1052.3	167.3	63.7	45.6	40.8	40.3	39.2	34.6	28.4	27.9
65°	1630.2	855.0	112.6	52.9	39.2	35.8	36.1	34.0	28.2	21.1	20.6
67.5°	1448.2	625.1	72.1	43.4	32.7	29.8	30.1	29.0	24.0	18.0	17.2
70°	1216.5	413.9	47.0	32.9	26.1	23.1	24.8	25.1	20.3	14.7	14.0
72.5°	891.7	244.5	32.9	24.5	19.2	16.1	20.3	20.8	16.3	11.0	10.5
75°	508.3	116.0	24.8	17.7	11.8	11.3	15.8	15.8	11.3	7.3	6.8
77.5°	213.4	48.5	17.4	11.6	6.8	6.5	10.7	9.8	5.6	3.4	3.4
80°	61.7	21.7	9.3	5.6	2.8	2.6	4.2	3.1	1.4	0.5	0.5
82.5°	24.2	9.5	3.7	2.3	1.1	1.1	0.5	0.0	0.0	0.0	0.0
85°	14.3	3.9	1.6	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	0.8	0.5	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)