

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: P959286

Luminaire Tested: **NAV-SB1A-735-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959286
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3727.9 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

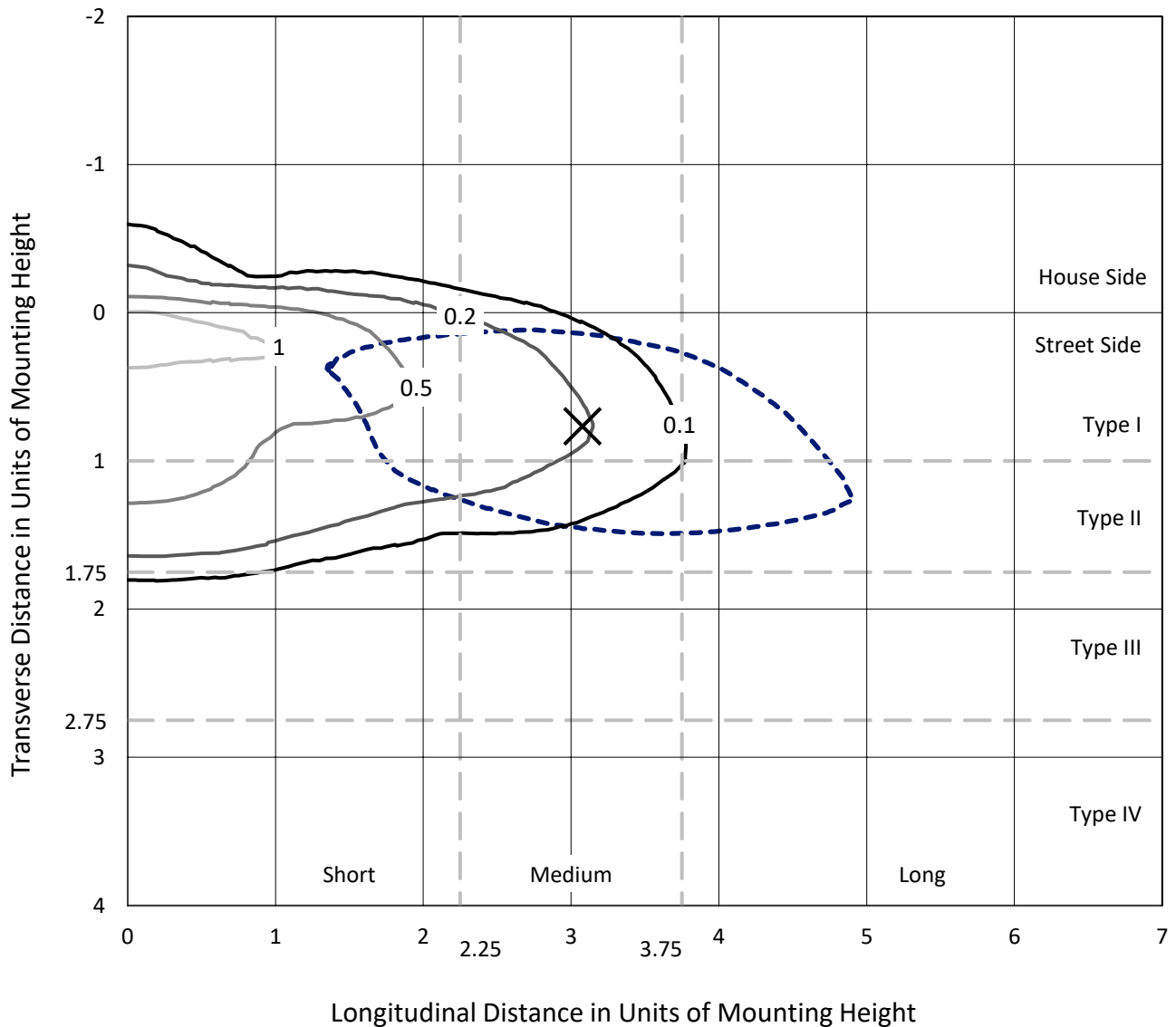
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

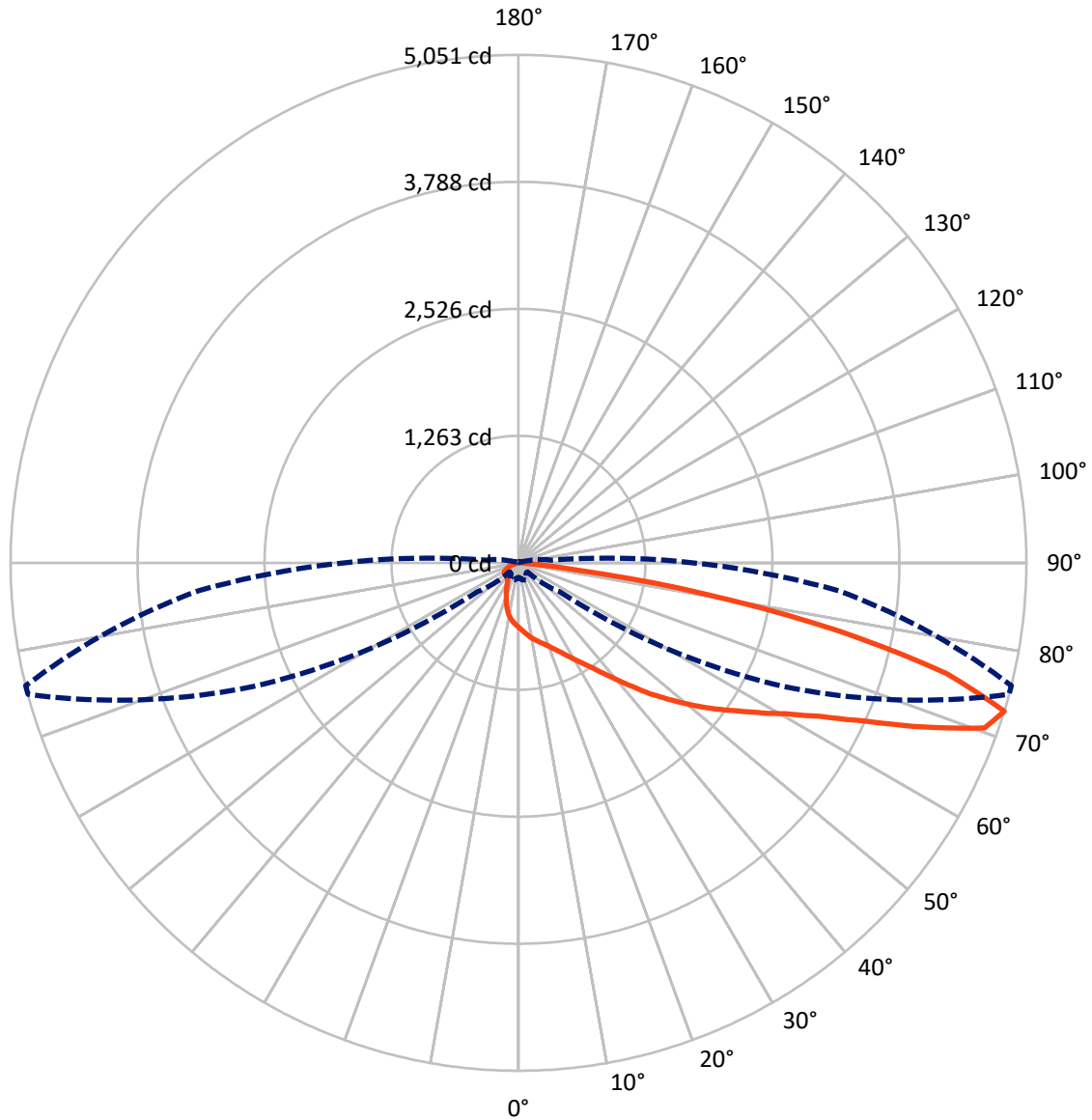
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	381.5	0.0	381.5
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	3346.4	0.0	3346.4
	% Fixture	89.8	0.0	89.8
Total	Lumens	3727.9	0.0	3727.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	1.6
10°-20°	157.1	4.2
20°-30°	248.6	6.7
30°-40°	384.7	10.3
40°-50°	584.3	15.7
50°-60°	805.5	21.6
60°-70°	851.0	22.8
70°-80°	583.8	15.7
80°-90°	54.3	1.5
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°	3727.9	100.0
0°-180°	3727.9	100.0

Coefficient of Utilization



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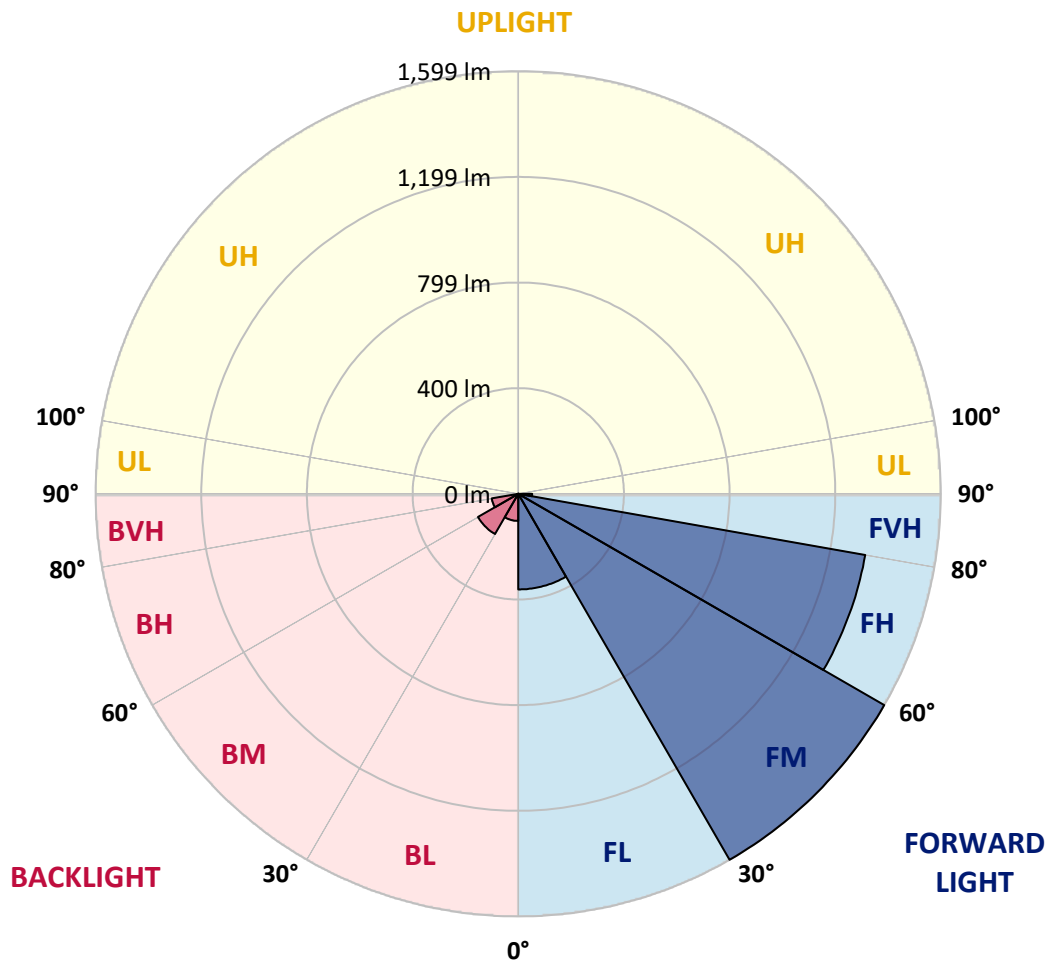
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	361.8	9.7			
FM (30°-60°)	1598.8	42.9			
FH (60°-80°)	1332.9	35.8			G1/1800
FVH (80°-90°)	52.9	1.4			G1/100
BL (0°-30°)	102.6	2.8	B0/110		
BM (30°-60°)	175.7	4.7	B0/220		
BH (60°-80°)	101.9	2.7	B0/110		G0/110
BVH (80°-90°)	1.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2
2.5°	749.0	739.0	741.0	731.0	726.4	715.3	703.7	688.5	671.6	671.6	655.1
5°	827.8	821.4	821.4	809.9	800.9	783.5	762.7	735.8	704.0	700.8	669.6
7.5°	876.2	872.3	874.6	867.9	860.7	842.6	817.8	782.8	737.6	733.7	686.7
10°	885.6	885.3	892.1	894.0	898.8	889.7	867.7	827.3	770.7	765.2	701.5
12.5°	849.0	844.5	861.1	880.7	908.3	920.7	909.3	867.9	800.9	793.1	715.3
15°	789.0	790.1	806.0	836.2	882.2	926.2	941.0	907.5	831.6	822.5	728.4
17.5°	754.7	751.1	764.9	792.0	842.8	904.9	955.7	944.5	864.3	853.9	741.7
20°	750.6	750.4	753.5	765.9	804.5	874.4	954.0	980.6	902.7	890.6	760.8
22.5°	779.2	778.7	776.0	773.6	784.2	844.7	946.7	1015.0	948.6	935.6	787.8
25°	823.0	822.2	818.1	803.3	792.9	828.7	939.9	1046.8	1003.1	988.6	820.7
27.5°	876.4	875.9	868.4	846.1	819.3	830.1	936.5	1079.7	1066.0	1051.6	858.7
30°	941.9	941.0	925.5	894.0	859.0	853.1	941.2	1116.7	1131.5	1120.6	902.5
32.5°	1024.1	1021.4	1001.1	953.8	904.7	883.9	949.9	1154.7	1209.1	1198.9	961.0
35°	1087.7	1083.6	1071.7	1029.9	957.7	921.6	970.2	1199.7	1302.5	1293.6	1035.8
37.5°	1142.4	1138.3	1128.6	1094.3	1033.5	969.8	1002.9	1259.6	1412.8	1408.4	1126.9
40°	1201.4	1194.6	1190.0	1153.2	1098.4	1039.1	1049.5	1329.8	1539.7	1540.2	1236.5
42.5°	1246.8	1244.1	1244.7	1216.4	1161.0	1121.4	1111.4	1408.9	1691.8	1696.4	1368.3
45°	1285.8	1283.6	1292.5	1272.7	1224.2	1175.3	1184.0	1498.3	1858.2	1867.7	1515.8
47.5°	1315.8	1318.1	1331.0	1318.1	1289.7	1213.2	1248.2	1594.8	2033.0	2034.2	1668.1
50°	1345.7	1346.7	1368.0	1361.7	1350.1	1261.4	1307.5	1702.7	2217.3	2219.4	1810.6
52.5°	1355.2	1353.7	1387.5	1403.0	1403.5	1320.8	1384.2	1820.2	2397.9	2405.0	1957.0
55°	1306.8	1311.0	1365.6	1428.4	1453.3	1403.0	1487.7	1968.9	2590.4	2593.4	2102.2
57.5°	1070.3	1093.1	1213.9	1359.8	1485.5	1520.8	1636.4	2142.8	2812.6	2810.0	2249.2
60°	649.5	676.6	821.2	1140.4	1380.6	1639.1	1855.6	2412.2	3055.4	3047.9	2397.9
62.5°	363.3	371.5	417.6	682.6	1050.0	1563.8	2069.5	2758.3	3381.4	3356.1	2544.3
65°	267.7	270.4	281.3	334.5	516.1	1202.8	2022.6	3172.0	3839.4	3794.2	2719.5
67.5°	232.7	235.3	245.9	253.2	230.4	631.9	1666.4	3401.5	4421.0	4361.8	2956.8
70°	195.9	197.3	214.5	219.4	164.9	240.4	1070.5	3330.6	4959.4	4917.0	3211.4
72.5°	146.1	151.9	176.8	188.4	132.3	127.7	504.0	2912.0	5050.5	5051.0	3194.2
75°	99.1	104.4	133.0	155.0	102.1	89.5	203.4	2174.4	4397.8	4397.8	2800.1
77.5°	67.8	72.1	92.7	121.7	77.4	61.4	105.5	1380.1	3155.1	3266.1	1995.8
80°	30.0	32.6	59.8	88.3	58.7	39.7	59.8	755.7	1908.0	1884.6	782.3
82.5°	14.8	16.9	38.2	55.1	37.9	24.4	31.5	359.4	618.4	587.6	122.1
85°	2.9	3.9	20.6	23.5	17.6	10.9	11.9	110.5	74.5	85.1	25.8
87.5°	0.0	0.0	6.3	4.3	1.9	2.5	2.5	9.9	5.8	6.8	6.8
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°	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2
2.5°	646.4	637.4	617.9	598.5	578.7	560.6	548.0	535.4	527.7	524.3	524.8
5°	651.5	633.3	592.2	549.2	506.7	465.0	433.9	404.6	395.3	380.2	381.1
7.5°	659.5	630.0	565.2	492.6	423.4	362.5	318.5	283.4	269.4	255.8	255.6
10°	664.8	623.7	529.3	432.3	338.8	270.4	228.3	202.8	193.7	185.5	185.2
12.5°	667.0	612.0	488.2	364.9	263.6	206.0	180.9	169.0	165.8	163.0	163.0
15°	668.9	600.6	442.3	299.8	208.2	172.4	162.5	158.7	156.4	154.6	154.6
17.5°	670.6	586.2	389.8	243.7	175.8	158.9	154.1	150.0	148.2	146.1	146.1
20°	676.4	572.2	342.9	201.2	158.2	149.2	143.9	139.5	138.1	136.6	136.8
22.5°	687.3	560.8	297.5	172.4	147.5	139.3	132.5	127.7	126.7	125.8	125.0
25°	700.3	546.7	254.6	153.8	137.1	127.9	120.4	116.3	115.3	115.6	115.1
27.5°	717.0	531.3	217.9	142.0	127.9	117.3	108.9	105.7	106.2	107.1	106.6
30°	735.3	517.0	189.1	133.8	119.7	107.8	99.4	97.2	98.9	100.3	99.8
32.5°	762.7	504.4	169.0	127.2	112.4	100.1	93.4	90.7	92.7	94.5	94.1
35°	799.9	498.2	157.6	121.7	106.2	94.1	87.3	85.4	87.3	87.7	87.5
37.5°	845.6	497.6	152.8	117.1	100.3	89.0	81.5	80.8	82.2	82.5	82.0
40°	904.7	500.8	149.2	113.7	94.3	83.2	76.2	75.4	76.0	77.6	77.4
42.5°	979.4	513.8	144.1	109.3	87.7	77.4	71.9	70.1	69.9	71.9	71.5
45°	1073.2	542.6	137.4	102.3	82.0	72.6	67.0	65.1	64.4	64.8	65.5
47.5°	1175.5	578.0	130.6	95.7	77.9	68.7	63.1	60.7	59.4	59.4	59.4
50°	1274.7	617.9	126.0	89.0	74.9	65.1	59.0	56.6	54.6	54.1	53.9
52.5°	1372.8	657.0	122.4	82.2	71.5	60.5	55.1	52.5	50.3	49.3	48.9
55°	1462.3	694.2	116.0	75.6	67.2	55.7	51.2	48.6	45.9	44.3	43.6
57.5°	1548.2	725.2	104.4	68.9	60.5	51.0	47.2	44.3	41.1	38.9	37.9
60°	1626.3	741.2	90.0	61.7	53.7	46.2	42.5	39.9	35.8	32.2	31.2
62.5°	1685.7	734.9	74.2	53.4	46.6	41.8	37.2	34.5	29.7	25.4	23.7
65°	1746.7	700.6	59.2	44.7	40.9	36.1	31.2	28.5	23.0	18.3	17.2
67.5°	1825.7	627.3	46.6	37.2	35.3	28.5	24.4	22.8	18.9	14.6	13.5
70°	1876.6	487.3	36.3	30.2	29.0	20.8	18.9	18.7	15.0	11.2	9.9
72.5°	1737.3	319.5	27.8	23.0	20.8	13.5	14.6	14.6	10.9	7.5	6.6
75°	1450.2	187.0	20.1	16.4	11.9	8.7	9.9	9.9	6.8	3.6	2.9
77.5°	1035.8	99.6	13.3	10.1	6.0	3.9	5.3	5.1	2.2	0.2	0.0
80°	396.1	34.3	6.3	4.1	1.7	0.7	0.5	0.2	0.2	0.0	0.0
82.5°	60.5	8.9	1.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.0	0.0	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)