

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: P961415

Luminaire Tested: **NAV-SB2A-735-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6961.8 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

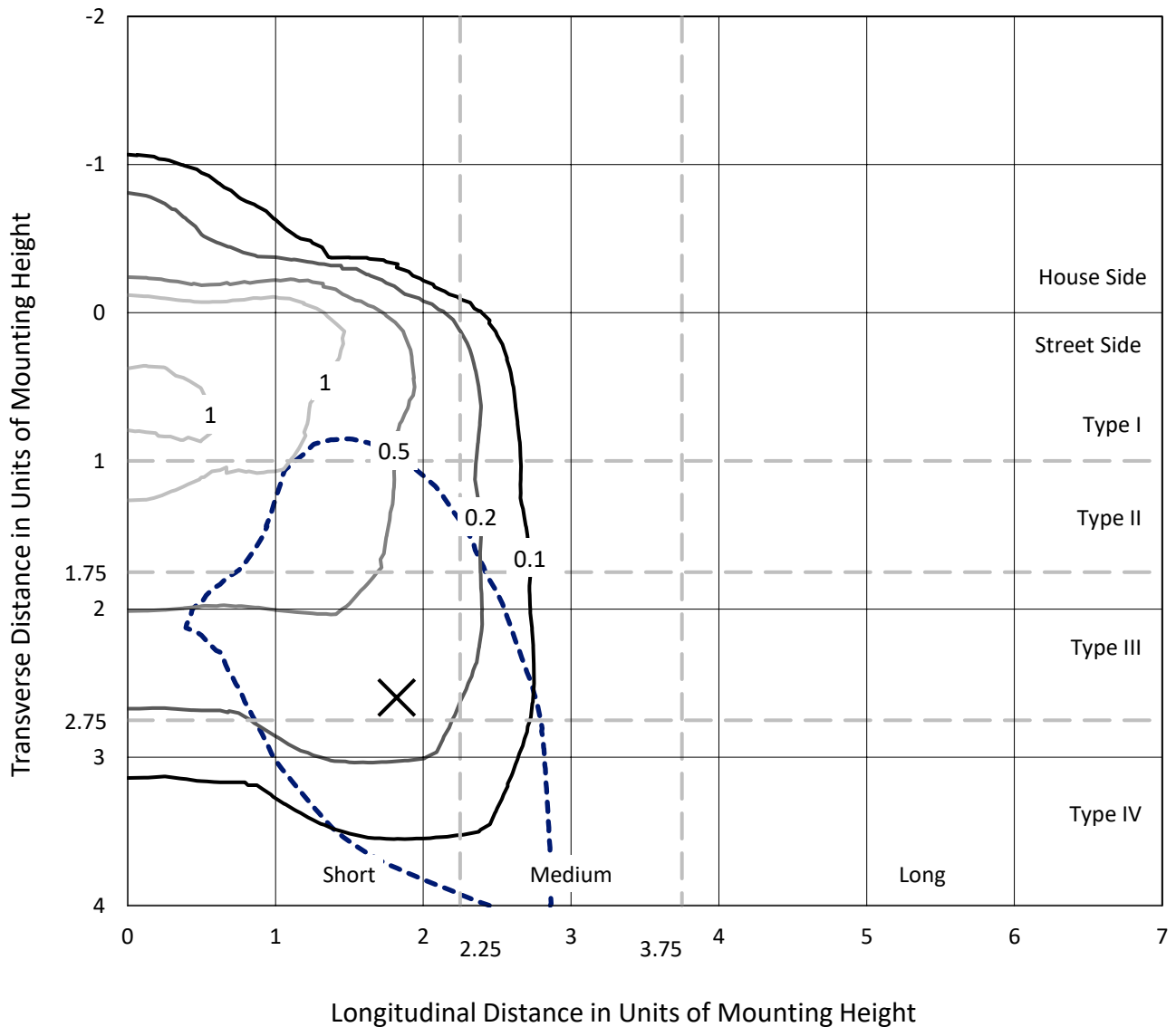
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

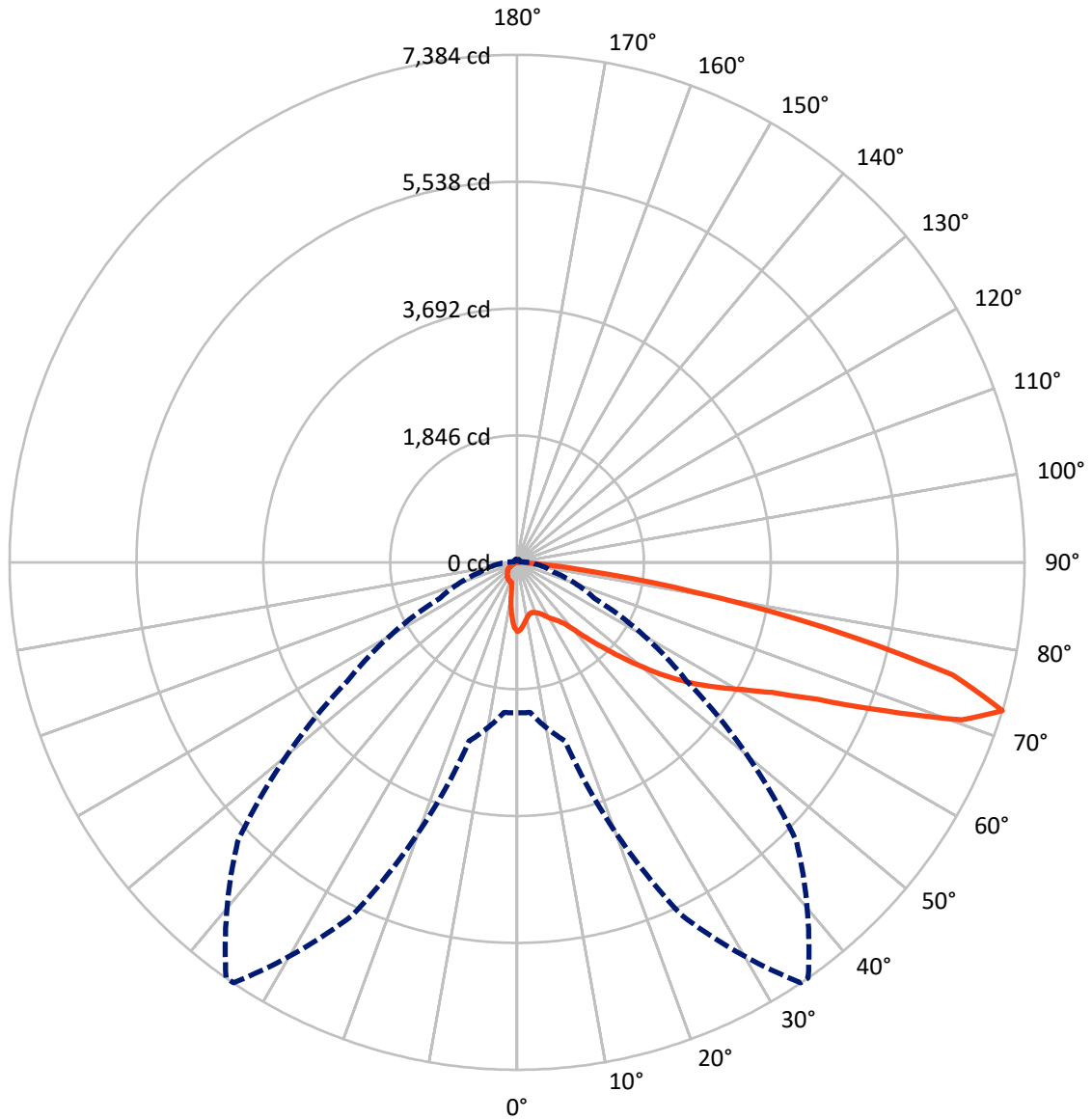
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	783.5	0.0	783.5
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6178.3	0.0	6178.3
	% Fixture	88.7	0.0	88.7
Total	Lumens	6961.8	0.0	6961.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.2
10°-20°	194.0	2.8
20°-30°	315.1	4.5
30°-40°	525.7	7.6
40°-50°	994.7	14.3
50°-60°	1580.5	22.7
60°-70°	1955.3	28.1
70°-80°	1215.4	17.5
80°-90°	98.2	1.4
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°	6961.8	100.0
0°-180°	6961.8	100.0

Coefficient of Utilization



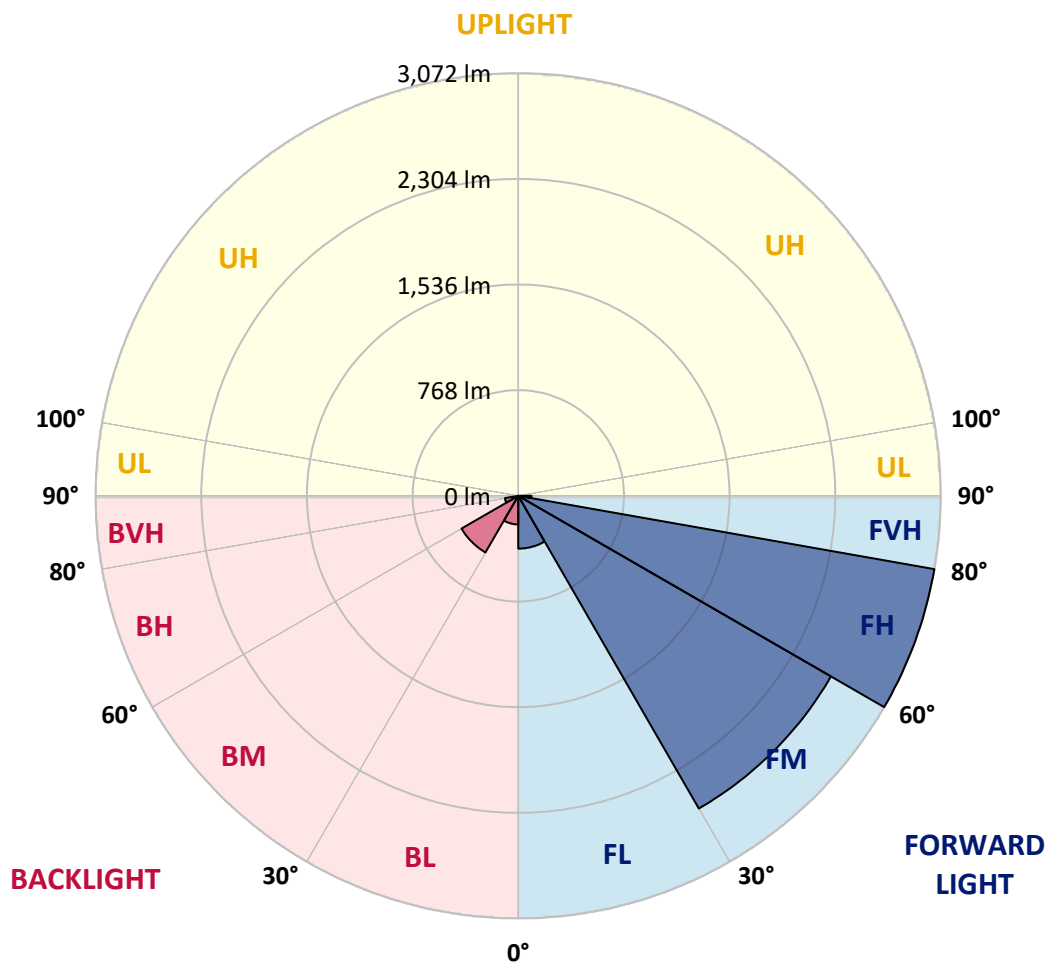
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	383.8	5.5			
FM	(30°-60°)	2625.3	37.7			
FH	(60°-80°)	3072.3	44.1			G2/5000
FVH	(80°-90°)	96.9	1.4			G1/100
BL	(0°-30°)	208.2	3.0	B1/500		
BM	(30°-60°)	475.7	6.8	B1/1000		
BH	(60°-80°)	98.3	1.4	B0/110		G0/110
BVH	(80°-90°)	1.3	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0
2.5°	964.1	972.3	973.7	976.3	976.3	979.4	984.5	991.7	1003.4	1009.5	1013.6
5°	888.6	894.7	902.4	908.5	920.2	921.8	941.7	961.0	988.1	1008.5	1022.7
7.5°	812.6	819.8	829.9	844.7	860.1	864.6	894.7	927.4	970.3	1008.5	1032.5
10°	759.0	759.5	768.7	783.5	808.0	813.6	850.3	896.8	950.4	1002.3	1041.6
12.5°	729.0	732.6	736.6	747.8	771.3	774.9	814.2	868.7	930.4	998.8	1052.4
15°	729.0	731.5	734.0	739.6	758.5	761.6	796.3	850.9	920.2	1000.3	1069.7
17.5°	736.6	740.7	738.6	745.3	765.2	767.2	797.9	845.7	919.7	1010.0	1096.2
20°	754.9	758.0	754.0	758.0	777.9	782.0	813.6	855.5	928.4	1026.8	1129.3
22.5°	784.0	785.6	775.9	778.9	799.3	804.4	841.2	883.0	949.4	1053.9	1173.7
25°	820.7	823.8	809.0	812.6	832.0	838.1	880.5	924.3	982.5	1091.1	1230.4
27.5°	863.2	864.6	851.9	851.4	876.4	885.1	927.9	975.3	1026.8	1138.1	1301.9
30°	911.5	916.1	903.9	901.9	933.5	940.6	983.0	1038.1	1092.1	1208.5	1403.3
32.5°	949.9	953.4	946.3	951.4	983.5	989.1	1049.8	1126.8	1194.6	1308.4	1541.6
35°	1004.9	1007.0	990.7	999.8	1036.6	1050.8	1141.1	1251.3	1323.8	1433.9	1722.1
37.5°	1204.4	1204.4	1135.0	1089.6	1124.8	1137.5	1266.1	1407.9	1482.9	1602.3	1949.7
40°	1480.3	1475.8	1374.2	1281.4	1276.8	1301.9	1444.1	1605.4	1688.5	1804.3	2205.7
42.5°	1774.7	1767.5	1629.3	1537.5	1522.1	1530.8	1649.7	1848.7	1933.4	2050.6	2481.2
45°	2035.9	2033.8	1907.3	1783.8	1756.3	1783.8	1906.3	2133.3	2194.0	2317.4	2756.1
47.5°	2254.7	2254.7	2162.3	2081.8	2067.5	2083.8	2253.7	2449.0	2443.4	2601.6	3024.0
50°	2506.6	2504.7	2417.0	2382.2	2397.0	2419.9	2653.6	2781.6	2701.6	2880.6	3263.2
52.5°	2683.1	2695.4	2665.3	2659.7	2735.2	2775.0	3059.6	3107.1	2932.6	3145.3	3442.3
55°	2823.0	2837.2	2871.9	2911.2	3056.5	3108.6	3452.9	3415.7	3125.9	3374.9	3545.3
57.5°	3020.9	3000.5	3054.0	3131.6	3366.7	3429.4	3834.0	3707.0	3281.5	3561.1	3556.4
60°	3261.1	3264.2	3273.3	3371.3	3676.4	3756.9	4209.5	3982.4	3381.5	3675.3	3432.0
62.5°	3549.9	3554.5	3573.4	3723.8	4092.1	4168.2	4609.3	4207.9	3427.4	3643.2	3110.7
65°	3530.0	3549.4	3760.0	4274.8	4724.1	4799.2	5076.1	4366.0	3358.1	3349.4	2532.7
67.5°	3215.7	3247.4	3599.8	4932.8	5677.1	5760.7	5640.3	4397.1	3058.6	2604.6	1652.2
70°	2803.6	2814.8	3238.7	5524.5	6780.4	6865.0	6145.3	4054.9	2321.0	1452.8	740.2
72.5°	2189.4	2192.0	2689.3	5661.7	7379.3	7383.9	5748.9	3010.1	1248.2	558.0	257.1
75°	1564.0	1548.7	1801.2	4591.5	6492.1	6544.2	4309.9	1411.9	476.9	263.7	128.0
77.5°	838.7	855.5	1019.2	2723.0	4484.9	4573.7	2351.7	407.0	242.8	179.6	84.7
80°	259.1	273.5	417.8	1246.7	2540.4	2593.9	871.8	181.1	169.3	128.0	55.6
82.5°	81.6	84.7	194.9	523.9	1054.4	1078.9	252.5	102.5	115.8	84.7	32.7
85°	23.5	24.0	86.7	195.4	260.7	265.8	70.9	39.8	66.3	52.6	16.8
87.5°	2.6	8.2	32.7	32.7	23.0	22.4	7.7	8.7	18.9	6.7	3.1
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°	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0
2.5°	1011.1	1011.6	1004.9	993.7	981.4	971.3	958.5	948.3	941.2	939.1	942.7
5°	1018.1	1014.6	995.7	961.6	920.8	885.6	846.2	815.2	794.8	786.1	789.1
7.5°	1028.9	1018.6	977.3	910.0	832.0	762.6	692.2	637.7	602.9	585.6	588.1
10°	1038.1	1017.6	946.8	835.6	716.2	611.1	516.2	450.4	413.7	396.4	396.9
12.5°	1046.7	1017.2	907.0	747.3	585.6	457.0	368.8	336.2	326.0	322.4	321.3
15°	1063.0	1018.6	857.0	646.3	455.5	345.3	313.2	312.7	314.8	313.8	313.2
17.5°	1085.5	1020.2	800.3	539.2	351.5	304.5	303.0	307.6	310.7	309.1	308.6
20°	1114.6	1026.3	740.2	433.1	302.0	294.4	297.9	302.0	304.5	302.0	301.5
22.5°	1155.4	1037.1	674.3	347.9	286.2	288.2	291.3	295.8	298.4	294.9	294.4
25°	1205.4	1053.9	609.6	302.5	278.5	281.1	285.7	290.8	293.9	290.3	289.8
27.5°	1270.2	1081.0	549.9	292.3	270.9	272.4	279.0	286.7	290.8	286.2	286.2
30°	1364.1	1125.3	498.4	296.8	266.3	262.7	271.9	282.6	287.2	283.1	282.6
32.5°	1488.5	1188.1	466.8	304.0	264.2	251.5	260.1	273.9	281.6	279.0	279.0
35°	1651.8	1283.4	454.5	312.2	262.7	239.7	245.9	260.7	273.9	276.4	276.4
37.5°	1849.6	1416.0	458.1	315.8	258.1	230.0	233.1	245.9	263.2	271.4	273.5
40°	2074.6	1570.6	478.5	312.2	253.0	221.9	222.4	232.1	247.4	259.6	263.7
42.5°	2306.8	1751.2	516.2	298.9	248.5	214.7	213.2	219.9	230.0	238.7	242.3
45°	2527.5	1936.8	553.5	280.5	242.8	207.7	204.1	206.6	208.6	212.2	214.2
47.5°	2720.5	2067.5	542.7	263.7	235.1	199.5	193.3	192.3	186.1	185.7	185.2
50°	2853.6	2096.0	482.1	246.9	224.0	190.2	180.6	174.5	163.8	158.7	159.2
52.5°	2895.9	1983.3	393.8	230.0	205.6	178.0	164.2	154.6	141.3	136.7	136.2
55°	2839.8	1762.4	314.8	209.6	180.1	161.7	146.4	133.7	122.9	117.4	117.4
57.5°	2702.5	1481.3	249.0	185.7	153.0	143.3	128.0	115.3	106.1	100.4	99.4
60°	2475.1	1176.3	196.9	157.1	130.6	123.4	107.6	99.4	91.3	84.7	83.1
62.5°	2129.7	839.7	154.6	124.4	109.2	101.0	91.8	85.7	76.1	66.8	65.3
65°	1661.9	513.7	119.4	91.3	87.7	83.6	78.0	72.5	60.7	51.6	50.0
67.5°	1048.3	243.3	85.2	68.9	69.4	67.3	64.8	60.2	51.6	43.4	42.3
70°	461.7	117.9	56.1	52.6	51.6	51.6	53.6	52.1	43.9	36.2	34.6
72.5°	157.1	63.2	41.8	39.8	37.2	36.7	44.9	43.4	35.2	28.1	26.5
75°	82.1	42.3	30.6	28.6	22.4	27.1	35.7	33.6	25.0	18.3	16.8
77.5°	53.6	30.1	20.9	18.3	12.7	17.8	26.5	23.5	14.8	9.2	8.2
80°	33.6	19.9	12.2	8.7	6.1	9.7	14.2	10.2	5.6	2.0	1.5
82.5°	17.8	10.2	4.6	3.1	2.6	3.1	3.6	2.6	1.0	0.0	0.0
85°	7.2	3.6	1.5	1.0	0.5	0.0	1.0	0.5	0.0	0.0	0.0
87.5°	2.6	0.5	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)