

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: P881620

Luminaire Tested: **NAV-SB1A-835-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881620
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-835-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2868 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

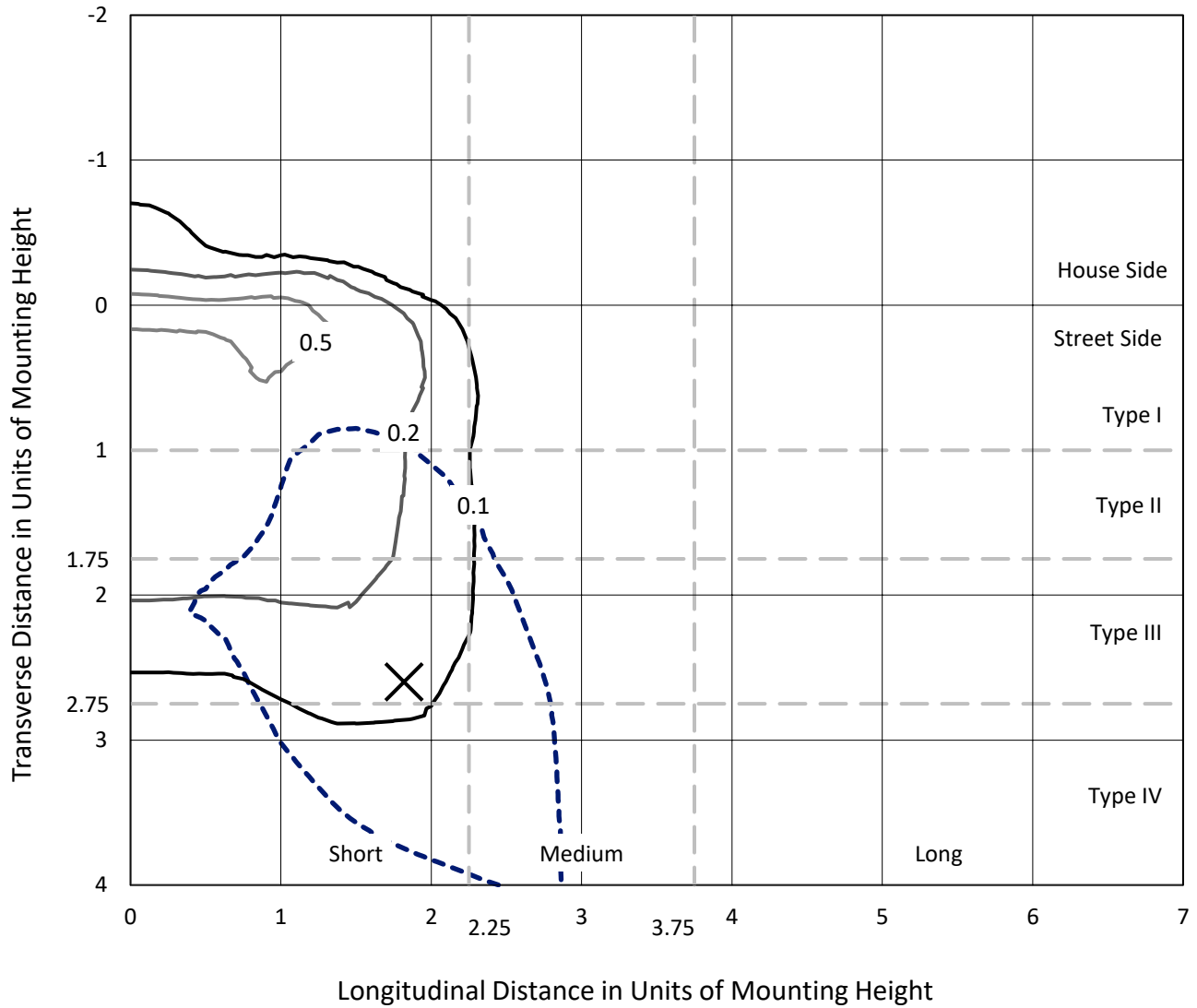
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

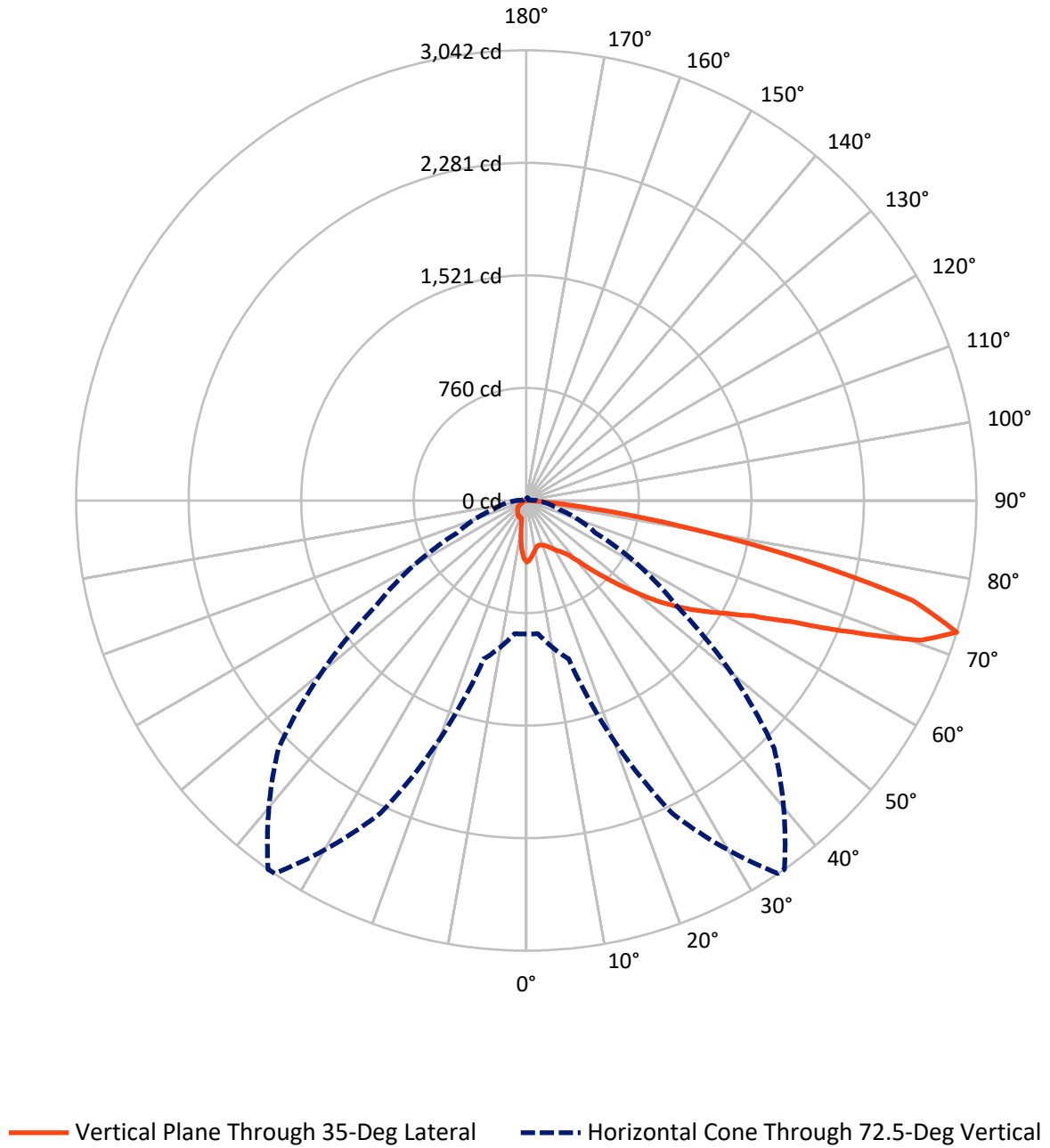
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	322.8	0.0	322.8
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	2545.2	0.0	2545.2
	% Fixture	88.7	0.0	88.7
Total	Lumens	2868.0	0.0	2868.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	1.2
10°-20°	79.9	2.8
20°-30°	129.8	4.5
30°-40°	216.6	7.6
40°-50°	409.8	14.3
50°-60°	651.1	22.7
60°-70°	805.5	28.1
70°-80°	500.7	17.5
80°-90°	40.5	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°	2868.0	100.0
0°-180°	2868.0	100.0

Coefficient of Utilization



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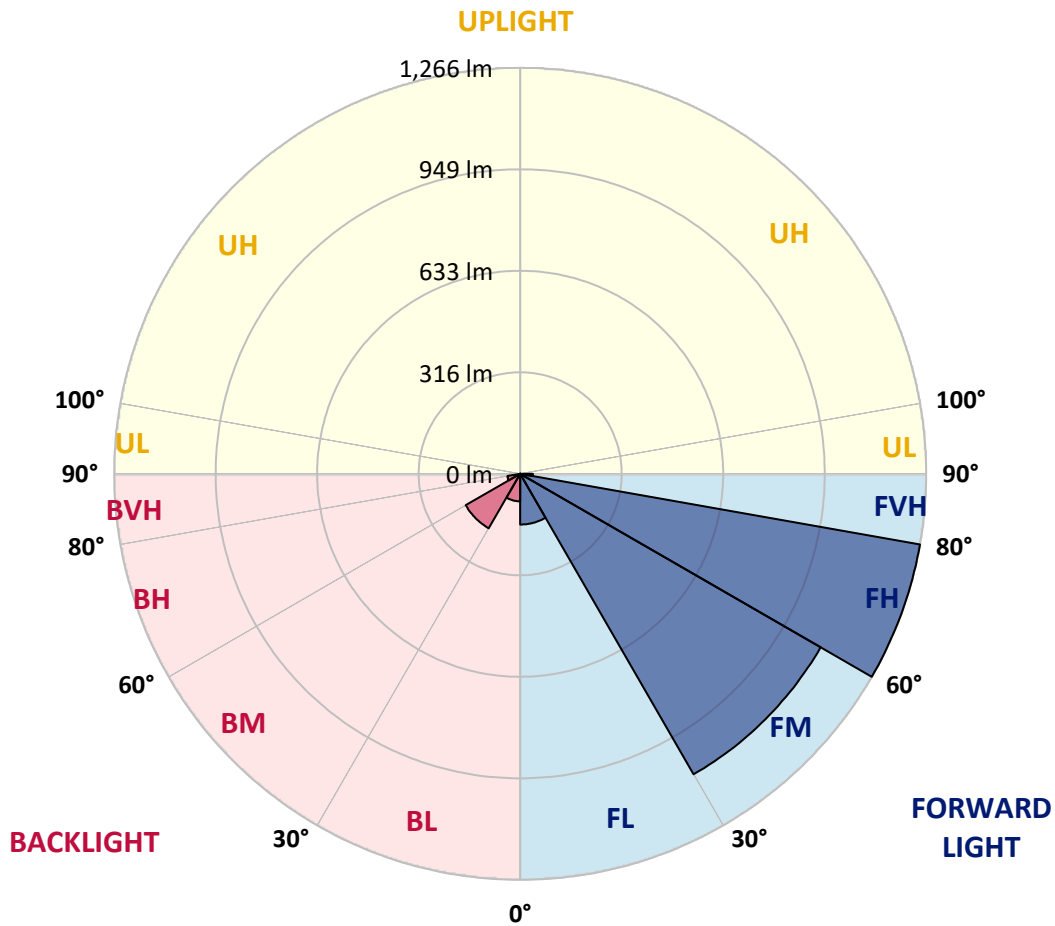
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	158.1	5.5			
FM (30°-60°)	1081.5	37.7			
FH (60°-80°)	1265.7	44.1			G1/1800
FVH (80°-90°)	39.9	1.4			G1/100
BL (0°-30°)	85.8	3.0	B0/110		
BM (30°-60°)	196.0	6.8	B0/220		
BH (60°-80°)	40.5	1.4	B0/110		G0/110
BVH (80°-90°)	0.6	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7
2.5°	397.2	400.5	401.2	402.2	402.2	403.5	405.6	408.5	413.4	415.9	417.6
5°	366.1	368.6	371.7	374.3	379.1	379.7	387.9	395.9	407.1	415.5	421.3
7.5°	334.8	337.7	341.9	348.0	354.3	356.2	368.6	382.0	399.7	415.5	425.3
10°	312.7	312.9	316.7	322.8	332.9	335.2	350.3	369.4	391.5	412.9	429.1
12.5°	300.3	301.8	303.5	308.1	317.7	319.2	335.4	357.9	383.3	411.5	433.5
15°	300.3	301.3	302.4	304.7	312.5	313.7	328.0	350.5	379.1	412.1	440.7
17.5°	303.5	305.1	304.3	307.0	315.2	316.1	328.7	348.4	378.9	416.1	451.6
20°	311.0	312.3	310.6	312.3	320.5	322.2	335.2	352.4	382.5	423.0	465.3
22.5°	323.0	323.6	319.6	320.9	329.3	331.4	346.5	363.8	391.1	434.2	483.5
25°	338.1	339.4	333.3	334.8	342.7	345.3	362.7	380.8	404.7	449.5	506.9
27.5°	355.6	356.2	350.9	350.7	361.0	364.6	382.3	401.8	423.0	468.8	536.3
30°	375.5	377.4	372.4	371.5	384.6	387.5	405.0	427.6	449.9	497.8	578.1
32.5°	391.3	392.8	389.8	391.9	405.2	407.5	432.5	464.2	492.2	539.0	635.1
35°	414.0	414.8	408.1	411.9	427.0	432.9	470.1	515.5	545.3	590.7	709.5
37.5°	496.2	496.2	467.6	448.9	463.4	468.6	521.6	580.0	610.9	660.1	803.2
40°	609.8	608.0	566.1	527.9	526.0	536.3	594.9	661.3	695.6	743.3	908.7
42.5°	731.1	728.2	671.2	633.4	627.1	630.6	679.6	761.6	796.5	844.8	1022.2
45°	838.7	837.9	785.7	734.9	723.5	734.9	785.3	878.8	903.8	954.7	1135.4
47.5°	928.8	928.8	890.8	857.6	851.7	858.4	928.4	1008.9	1006.6	1071.7	1245.7
50°	1032.7	1031.8	995.7	981.4	987.5	996.9	1093.2	1145.9	1112.9	1186.7	1344.3
52.5°	1105.4	1110.4	1098.0	1095.7	1126.8	1143.2	1260.5	1280.0	1208.1	1295.8	1418.1
55°	1162.9	1168.8	1183.1	1199.3	1259.2	1280.6	1422.5	1407.1	1287.8	1390.3	1460.5
57.5°	1244.5	1236.1	1258.1	1290.1	1387.0	1412.8	1579.5	1527.1	1351.9	1467.0	1465.1
60°	1343.5	1344.7	1348.5	1388.9	1514.5	1547.7	1734.1	1640.6	1393.1	1514.1	1413.9
62.5°	1462.4	1464.3	1472.1	1534.1	1685.8	1717.1	1898.9	1733.5	1412.0	1500.9	1281.5
65°	1454.2	1462.2	1549.0	1761.0	1946.2	1977.1	2091.2	1798.6	1383.4	1379.8	1043.4
67.5°	1324.8	1337.8	1483.0	2032.1	2338.7	2373.2	2323.6	1811.5	1260.0	1073.0	680.7
70°	1155.0	1159.6	1334.2	2275.9	2793.3	2828.1	2531.6	1670.5	956.2	598.5	304.9
72.5°	901.9	903.0	1107.9	2332.4	3040.0	3041.9	2368.3	1240.1	514.2	229.9	105.9
75°	644.3	638.0	742.0	1891.5	2674.5	2696.0	1775.5	581.7	196.5	108.6	52.7
77.5°	345.5	352.4	419.9	1121.8	1847.6	1884.2	968.8	167.7	100.0	74.0	34.9
80°	106.8	112.6	172.1	513.6	1046.5	1068.6	359.1	74.6	69.8	52.7	22.9
82.5°	33.6	34.9	80.3	215.8	434.4	444.5	104.0	42.2	47.7	34.9	13.4
85°	9.7	9.9	35.7	80.5	107.4	109.5	29.2	16.4	27.3	21.6	6.9
87.5°	1.1	3.4	13.4	13.4	9.5	9.2	3.2	3.6	7.8	2.7	1.3
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°	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7	415.7
2.5°	416.5	416.7	414.0	409.4	404.3	400.1	394.9	390.7	387.7	386.9	388.4
5°	419.5	418.0	410.2	396.1	379.3	364.8	348.6	335.8	327.4	323.8	325.1
7.5°	423.9	419.7	402.6	374.9	342.7	314.2	285.2	262.7	248.4	241.2	242.3
10°	427.6	419.2	390.0	344.2	295.0	251.8	212.7	185.6	170.4	163.3	163.5
12.5°	431.2	419.0	373.6	307.9	241.2	188.3	151.9	138.5	134.3	132.8	132.4
15°	437.9	419.7	353.0	266.3	187.7	142.3	129.0	128.8	129.7	129.2	129.0
17.5°	447.2	420.3	329.7	222.1	144.8	125.5	124.8	126.7	128.0	127.3	127.1
20°	459.2	422.8	304.9	178.4	124.4	121.3	122.7	124.4	125.5	124.4	124.2
22.5°	476.0	427.2	277.8	143.3	117.9	118.7	120.0	121.9	122.9	121.5	121.3
25°	496.6	434.2	251.1	124.6	114.7	115.8	117.7	119.8	121.0	119.6	119.4
27.5°	523.3	445.3	226.5	120.4	111.6	112.2	115.0	118.1	119.8	117.9	117.9
30°	561.9	463.6	205.3	122.3	109.7	108.2	112.0	116.4	118.3	116.6	116.4
32.5°	613.2	489.4	192.3	125.2	108.9	103.6	107.2	112.8	116.0	115.0	115.0
35°	680.5	528.7	187.2	128.6	108.2	98.8	101.3	107.4	112.8	113.9	113.9
37.5°	762.0	583.4	188.7	130.1	106.3	94.8	96.0	101.3	108.4	111.8	112.6
40°	854.7	647.0	197.1	128.6	104.2	91.4	91.6	95.6	101.9	107.0	108.6
42.5°	950.3	721.4	212.7	123.1	102.3	88.5	87.8	90.6	94.8	98.3	99.8
45°	1041.3	797.9	228.0	115.6	100.0	85.5	84.1	85.1	85.9	87.4	88.3
47.5°	1120.7	851.7	223.6	108.6	96.9	82.2	79.6	79.2	76.7	76.5	76.3
50°	1175.6	863.5	198.6	101.7	92.3	78.4	74.4	71.9	67.5	65.4	65.6
52.5°	1193.0	817.0	162.2	94.8	84.7	73.3	67.7	63.7	58.2	56.3	56.1
55°	1169.9	726.1	129.7	86.4	74.2	66.6	60.3	55.1	50.6	48.3	48.3
57.5°	1113.4	610.3	102.6	76.5	63.0	59.1	52.7	47.5	43.7	41.4	41.0
60°	1019.6	484.6	81.1	64.7	53.8	50.9	44.3	41.0	37.6	34.9	34.3
62.5°	877.4	345.9	63.7	51.3	45.0	41.6	37.8	35.3	31.3	27.5	26.9
65°	684.7	211.6	49.2	37.6	36.1	34.5	32.2	29.8	25.0	21.2	20.6
67.5°	431.9	100.2	35.1	28.4	28.6	27.7	26.7	24.8	21.2	17.9	17.4
70°	190.2	48.5	23.1	21.6	21.2	21.2	22.1	21.4	18.1	14.9	14.3
72.5°	64.7	26.1	17.2	16.4	15.3	15.1	18.5	17.9	14.5	11.6	10.9
75°	33.8	17.4	12.6	11.8	9.2	11.1	14.7	13.9	10.3	7.6	6.9
77.5°	22.1	12.4	8.6	7.6	5.3	7.4	10.9	9.7	6.1	3.8	3.4
80°	13.9	8.2	5.0	3.6	2.5	4.0	5.9	4.2	2.3	0.8	0.6
82.5°	7.4	4.2	1.9	1.3	1.1	1.3	1.5	1.1	0.4	0.0	0.0
85°	2.9	1.5	0.6	0.4	0.2	0.0	0.4	0.2	0.0	0.0	0.0
87.5°	1.1	0.2	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)