

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: P962383

Luminaire Tested: **NAV-SB2C-727-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-727-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12140.1 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

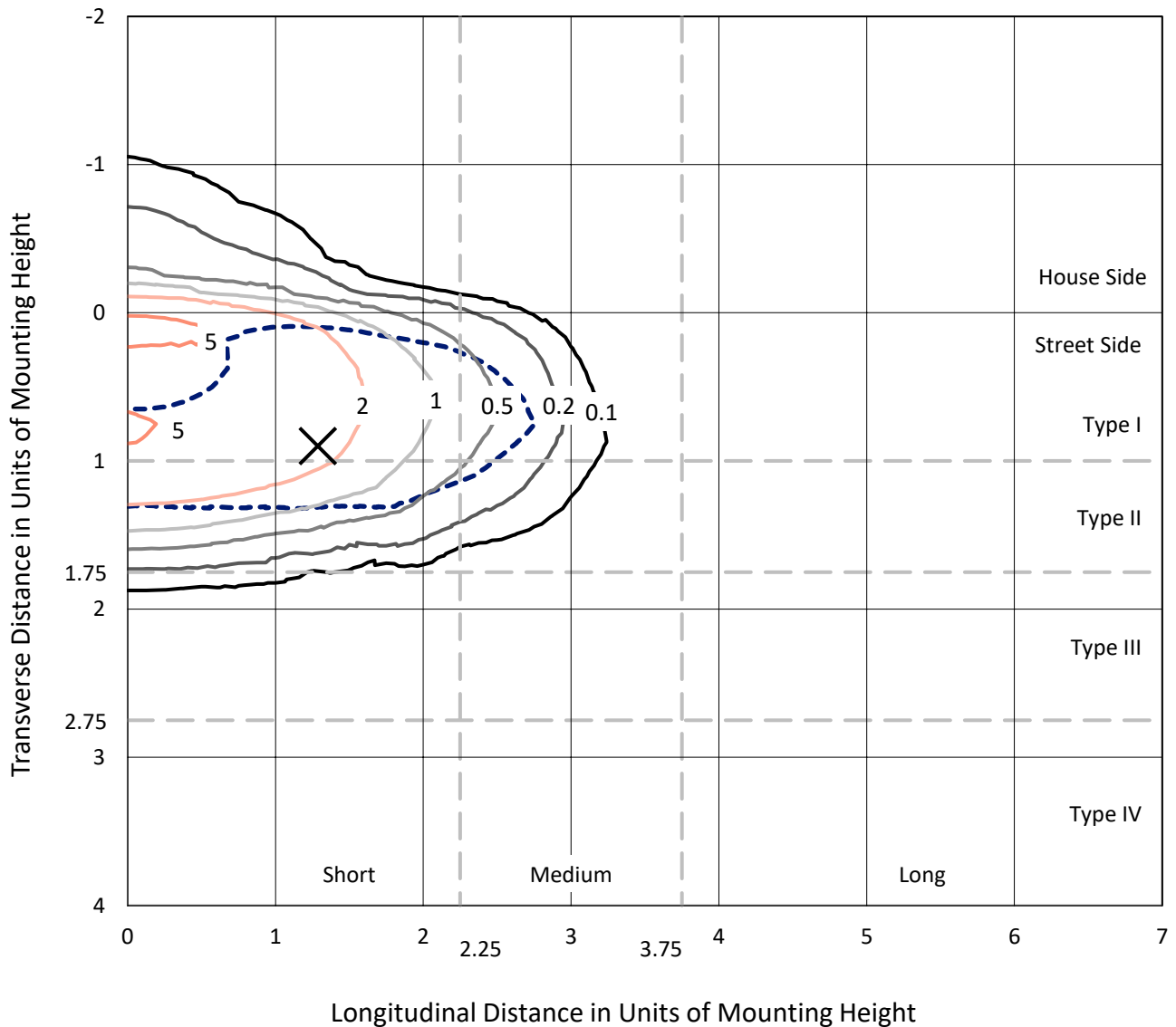
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

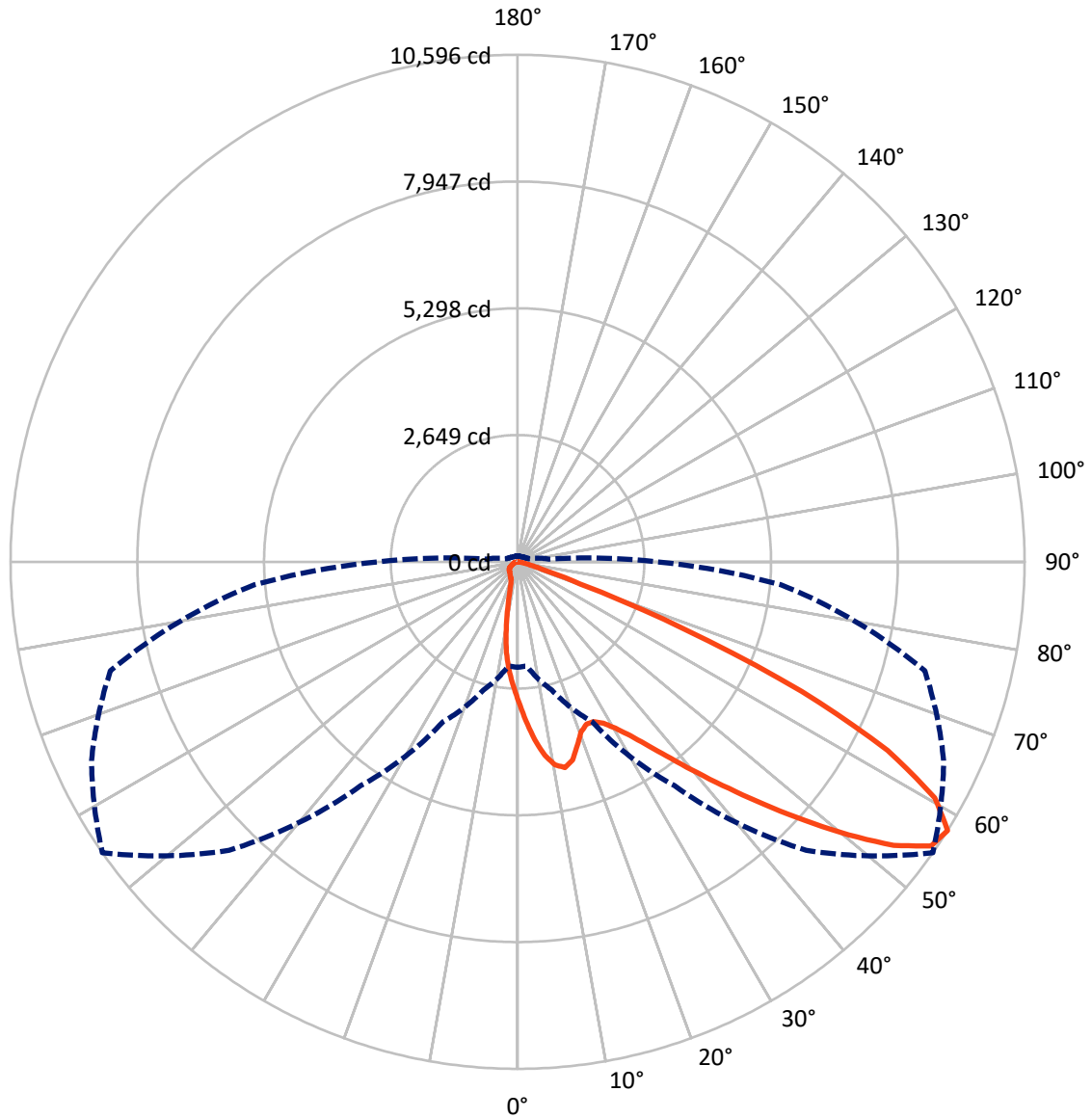
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	948.1	0.0	948.1
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	11192.0	0.0	11192.0
	% Fixture	92.2	0.0	92.2
Total	Lumens	12140.1	0.0	12140.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.2	2.2
10°-20°	657.5	5.4
20°-30°	1052.0	8.7
30°-40°	1780.6	14.7
40°-50°	2923.3	24.1
50°-60°	3212.9	26.5
60°-70°	1842.9	15.2
70°-80°	376.6	3.1
80°-90°	22.2	0.2
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°	12140.1	100.0
0°-180°	12140.1	100.0

Coefficient of Utilization

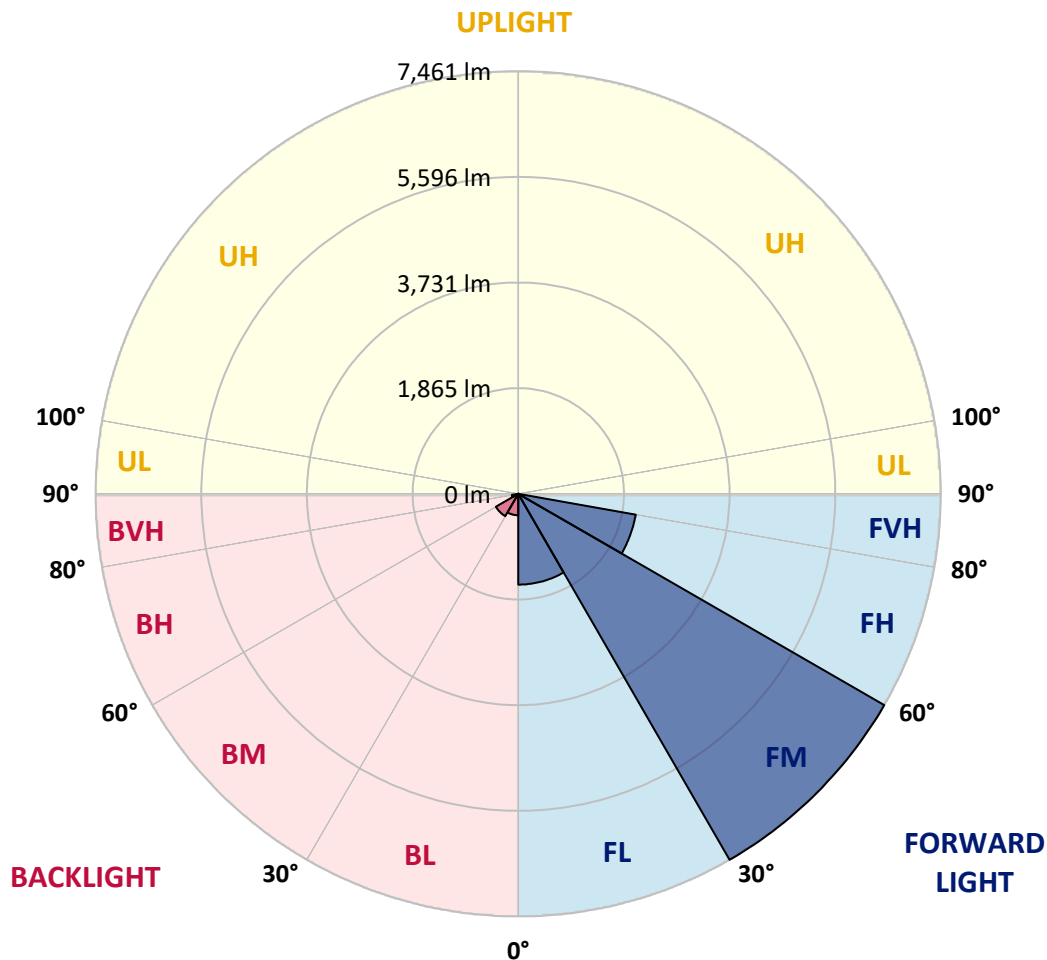


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1603.2	13.2			
FM (30°-60°)	7461.4	61.5			
FH (60°-80°)	2106.7	17.4			G2/5000
FVH (80°-90°)	20.7	0.2			G1/100
BL (0°-30°)	378.5	3.1	B1/500		
BM (30°-60°)	455.3	3.8	B1/1000		
BH (60°-80°)	112.8	0.9	B1/500		G1/500
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: B1-U0-G2
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5
2.5°	3629.8	3584.2	3577.5	3568.5	3481.6	3416.5	3322.2	3218.9	3102.9	2984.6	2932.2
5°	4193.6	4157.6	4150.9	4109.0	4010.2	3899.4	3731.7	3519.8	3303.5	3049.0	2939.7
7.5°	4302.8	4296.1	4326.8	4325.3	4311.9	4224.2	4082.8	3830.5	3505.6	3128.3	2959.2
10°	3815.6	3832.8	3924.1	4004.2	4220.5	4346.3	4315.6	4107.5	3713.7	3218.9	2980.9
12.5°	3371.6	3351.4	3416.5	3507.1	3758.7	4132.9	4412.1	4338.8	3951.8	3321.5	3013.1
15°	3093.1	3084.9	3121.6	3163.6	3355.1	3732.4	4299.9	4526.7	4180.9	3442.8	3061.7
17.5°	3004.1	2997.3	3008.6	3019.0	3143.3	3435.3	4032.7	4641.9	4400.2	3581.2	3115.6
20°	3076.6	3067.7	3066.2	3058.0	3109.6	3308.7	3790.9	4650.2	4597.0	3707.0	3162.0
22.5°	3288.5	3278.1	3241.4	3208.5	3213.0	3325.9	3683.0	4567.8	4745.2	3824.5	3191.2
25°	3672.6	3655.4	3579.0	3468.2	3397.8	3445.7	3699.5	4459.3	4886.8	3916.6	3177.0
27.5°	4153.1	4130.6	4032.7	3867.9	3707.0	3648.6	3818.5	4384.4	5004.3	3986.9	3146.3
30°	4624.0	4594.8	4498.2	4370.2	4135.2	3951.1	4033.4	4417.4	5144.3	4060.3	3105.9
32.5°	5132.3	5104.6	4976.6	4817.9	4623.3	4375.5	4327.5	4578.4	5315.6	4162.8	3077.5
35°	5775.4	5731.9	5550.0	5333.7	5127.0	4876.2	4725.8	4856.0	5544.0	4319.3	3093.1
37.5°	6507.4	6449.1	6252.9	5954.2	5684.8	5404.0	5210.9	5237.9	5878.6	4529.0	3141.8
40°	7197.7	7144.5	6963.3	6681.9	6343.5	6002.9	5797.0	5737.1	6340.5	4784.2	3227.1
42.5°	7611.5	7563.7	7487.3	7368.3	7083.1	6735.8	6476.0	6346.5	6887.0	5089.6	3331.1
45°	7634.8	7592.9	7695.4	7834.0	7777.8	7546.5	7229.8	6992.6	7435.7	5376.3	3439.0
47.5°	7263.5	7235.1	7546.5	8030.1	8271.1	8368.4	8076.5	7584.7	7888.6	5582.2	3483.2
50°	6251.4	6240.9	6881.7	7769.5	8459.0	9088.6	8969.6	8135.6	8239.7	5688.4	3441.2
52.5°	5420.5	5382.3	5755.9	6935.7	8185.8	9467.3	9842.4	8676.1	8485.2	5708.7	3343.1
55°	4111.2	4077.6	4546.2	5540.2	7304.7	9332.6	10480.9	9233.8	8661.1	5657.1	3167.2
57.5°	2205.3	2184.4	2776.5	3687.5	5710.2	8524.1	10596.2	9823.7	8809.4	5520.0	2920.9
60°	858.6	854.8	1076.5	1789.1	3470.4	6934.8	10014.6	10177.7	8902.1	5351.6	2715.1
62.5°	519.5	530.7	566.7	803.2	1533.1	4308.1	8673.9	9775.0	8964.2	5197.5	2545.2
65°	429.7	430.4	434.9	551.7	734.3	1802.6	6529.9	8450.0	8810.8	4922.7	2304.1
67.5°	368.3	375.0	392.3	437.9	518.0	790.5	3759.4	6545.6	7877.3	4283.4	1928.3
70°	290.5	299.4	321.1	360.1	399.7	494.8	1389.4	4355.2	6017.9	3228.6	1458.3
72.5°	244.8	244.1	255.2	292.7	317.4	348.1	534.5	2440.4	3497.4	1541.3	721.6
75°	189.4	196.9	211.2	244.8	259.7	252.3	289.7	891.5	1253.2	467.1	245.5
77.5°	148.2	154.2	167.0	199.9	214.8	178.9	167.0	318.9	402.7	167.7	110.8
80°	66.6	71.9	113.8	147.5	175.2	123.5	90.6	163.2	178.9	76.4	56.2
82.5°	12.0	20.2	66.6	77.9	89.8	80.1	47.2	84.6	87.5	30.6	19.5
85°	0.7	1.5	23.2	28.5	36.0	26.2	14.2	33.7	29.2	10.5	7.5
87.5°	0.0	0.0	0.0	0.7	0.7	3.8	4.5	5.9	4.5	3.8	3.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5	2925.5
2.5°	2878.3	2772.0	2668.7	2584.1	2534.7	2450.9	2395.4	2386.5	2363.2	2383.5
5°	2823.0	2632.8	2440.4	2268.2	2126.8	1944.1	1807.8	1750.2	1700.1	1717.3
7.5°	2796.7	2496.5	2197.1	1902.9	1600.4	1308.5	1091.4	1000.8	932.0	941.7
10°	2761.6	2355.0	1885.7	1436.5	1031.6	743.3	593.6	538.2	507.6	508.3
12.5°	2734.6	2185.9	1524.1	974.0	628.0	474.6	428.1	414.7	405.7	406.5
15°	2721.1	1986.8	1167.1	649.0	449.2	402.0	390.7	384.8	378.7	378.0
17.5°	2698.6	1765.2	854.1	473.9	393.0	376.6	366.8	360.1	352.6	351.1
20°	2665.0	1513.6	624.3	400.5	368.3	355.6	342.1	333.1	324.1	322.7
22.5°	2602.8	1247.9	479.8	370.5	350.3	336.1	319.6	309.1	300.2	298.7
25°	2487.6	998.7	404.3	351.9	334.7	317.4	299.4	285.3	277.0	275.5
27.5°	2341.6	784.5	366.8	334.7	314.4	298.7	278.5	265.0	257.5	256.0
30°	2169.4	604.1	345.1	315.2	290.5	277.0	259.0	247.7	243.3	243.3
32.5°	1983.8	482.9	336.1	295.7	269.5	254.5	240.3	235.9	234.3	233.6
35°	1809.3	419.2	331.6	279.9	250.8	236.6	230.5	231.3	234.3	234.3
37.5°	1654.4	399.0	329.3	268.8	234.3	221.6	225.3	232.1	229.1	229.1
40°	1514.3	401.3	327.9	260.6	220.8	213.3	220.8	215.6	208.1	207.4
42.5°	1407.3	419.9	324.9	253.8	212.6	207.4	204.4	196.1	195.4	196.9
45°	1329.5	436.4	324.1	250.8	203.6	193.9	190.1	181.9	196.9	200.6
47.5°	1237.4	436.4	324.1	240.3	188.6	184.9	178.9	169.9	184.9	188.6
50°	1118.4	408.8	311.4	228.3	176.7	174.5	163.9	152.7	149.8	152.0
52.5°	967.9	358.5	279.2	211.9	164.7	160.2	147.5	139.2	136.9	136.9
55°	796.5	300.2	235.9	187.9	152.0	143.7	134.8	131.0	128.7	127.3
57.5°	647.5	246.3	189.4	167.0	140.0	129.5	126.5	122.0	118.3	116.0
60°	531.5	193.9	156.4	148.2	128.0	118.3	117.6	111.5	101.8	100.3
62.5°	410.2	142.3	131.7	128.7	116.0	107.8	106.3	94.3	79.3	76.4
65°	289.7	110.8	106.3	113.1	103.3	95.8	92.0	74.1	58.4	56.2
67.5°	203.6	92.9	83.8	98.8	89.8	80.1	77.9	62.8	48.7	47.2
70°	145.2	75.6	68.9	84.6	71.9	70.4	65.9	52.4	39.7	38.1
72.5°	102.6	57.6	53.2	73.4	49.4	60.7	53.9	40.4	29.9	28.5
75°	75.6	41.2	37.4	42.6	36.0	45.6	38.1	27.0	18.8	17.9
77.5°	55.4	26.2	22.4	20.9	20.9	28.5	20.9	11.3	8.2	7.5
80°	38.9	12.0	10.5	9.0	8.2	6.8	3.0	1.5	0.7	0.7
82.5°	23.2	5.2	5.2	3.8	2.3	0.0	0.0	0.0	0.0	0.0
85°	5.2	2.3	2.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.7	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

(END OF REPORT)