

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: P961856

Luminaire Tested: **NAV-SB2B-727-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961856
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-SB2B-727-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA 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: 9128.6 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

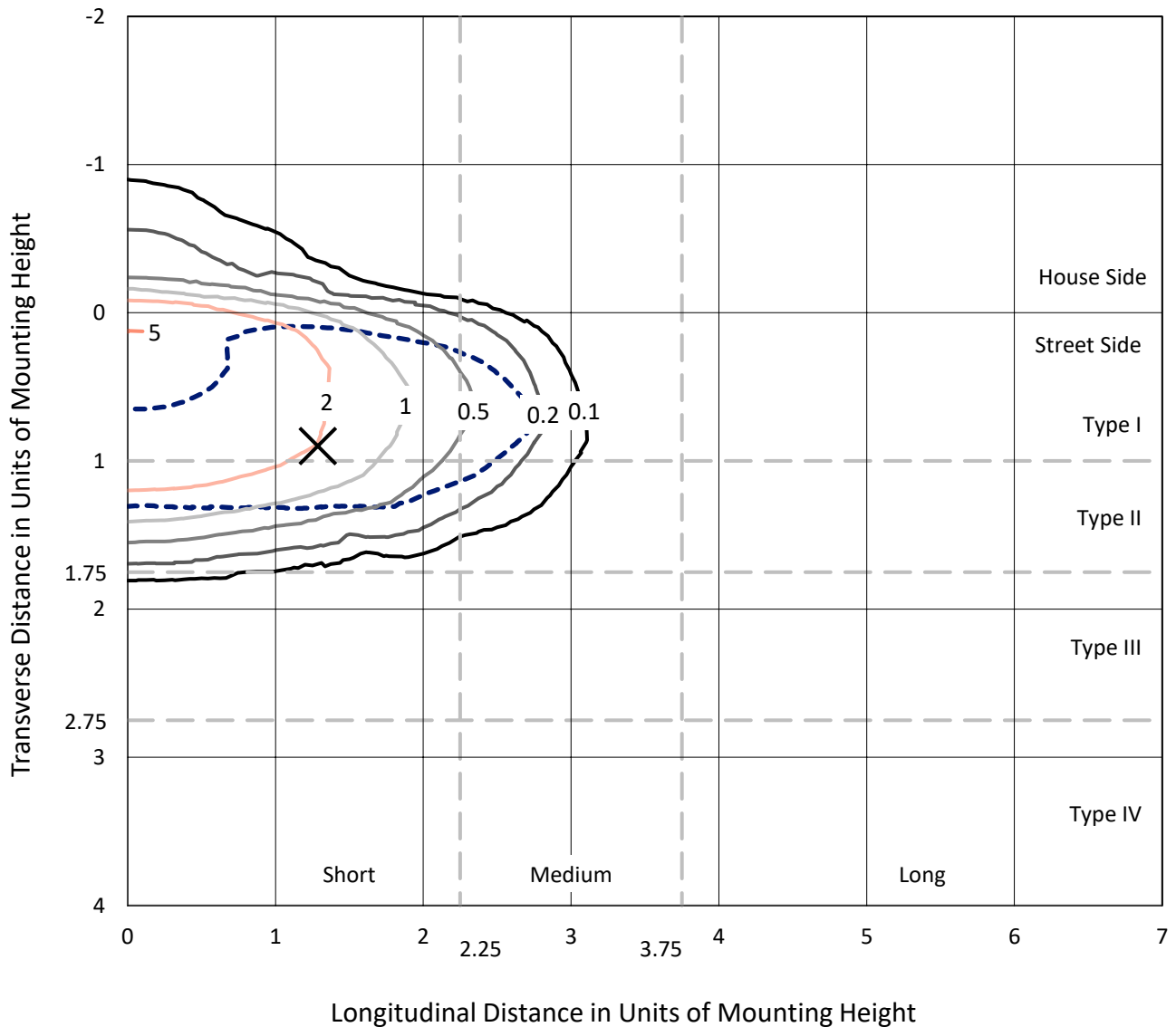
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

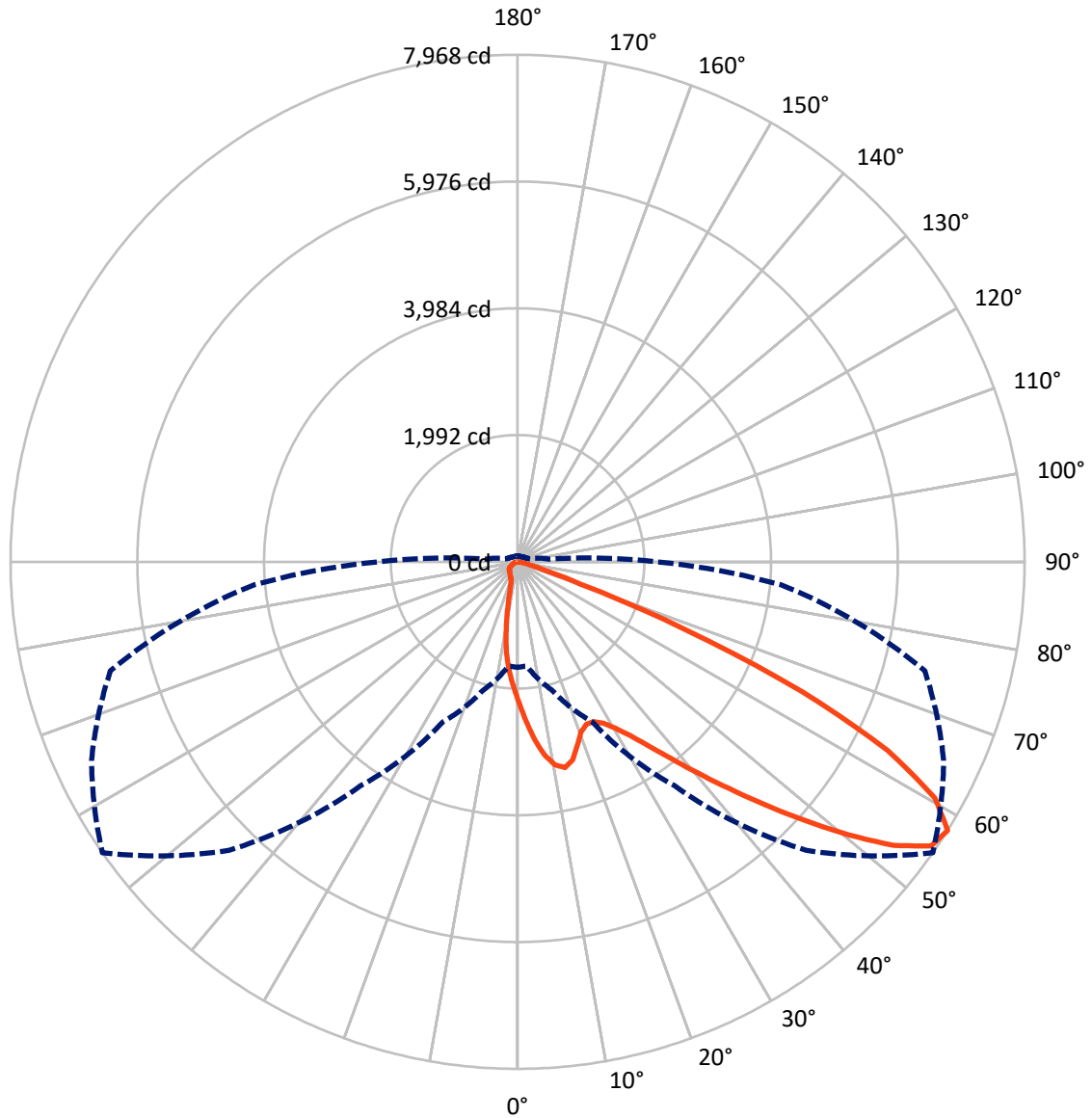
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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	712.9	0.0	712.9
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	8415.7	0.0	8415.7
	% Fixture	92.2	0.0	92.2
Total	Lumens	9128.6	0.0	9128.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.7	2.2
10°-20°	494.4	5.4
20°-30°	791.0	8.7
30°-40°	1338.9	14.7
40°-50°	2198.1	24.1
50°-60°	2415.9	26.5
60°-70°	1385.8	15.2
70°-80°	283.2	3.1
80°-90°	16.7	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°	9128.6	100.0
0°-180°	9128.6	100.0

Coefficient of Utilization



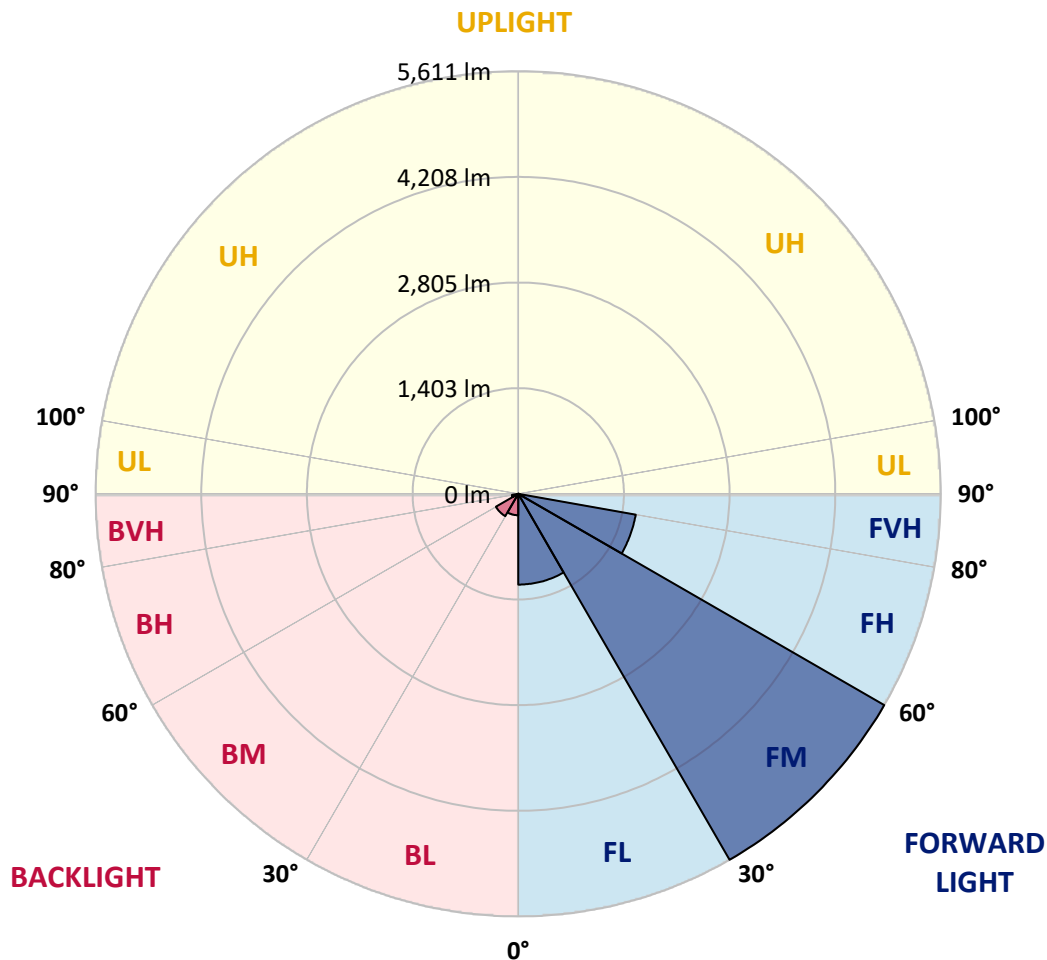
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1205.5	13.2			
FM (30°-60°)	5610.5	61.5			
FH (60°-80°)	1584.1	17.4			G1/1800
FVH (80°-90°)	15.6	0.2			G1/100
BL (0°-30°)	284.6	3.1	B1/500		
BM (30°-60°)	342.4	3.8	B1/1000		
BH (60°-80°)	84.8	0.9	B0/110		G0/110
BVH (80°-90°)	1.1	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8
2.5°	2729.5	2695.1	2690.0	2683.3	2618.1	2569.1	2498.1	2420.4	2333.2	2244.2	2204.9
5°	3153.3	3126.2	3121.2	3089.8	3015.4	2932.1	2806.0	2646.8	2484.1	2292.6	2210.5
7.5°	3235.5	3230.4	3253.6	3252.4	3242.3	3176.4	3070.0	2880.4	2636.0	2352.3	2225.1
10°	2869.1	2882.0	2950.7	3010.9	3173.6	3268.1	3245.0	3088.6	2792.5	2420.4	2241.5
12.5°	2535.2	2520.1	2569.1	2637.1	2826.2	3107.7	3317.7	3262.5	2971.5	2497.5	2265.7
15°	2325.8	2319.7	2347.2	2378.8	2522.8	2806.6	3233.3	3403.8	3143.8	2588.7	2302.3
17.5°	2258.9	2253.8	2262.3	2270.2	2363.5	2583.1	3032.3	3490.5	3308.7	2692.9	2342.7
20°	2313.5	2306.8	2305.6	2299.4	2338.2	2488.0	2850.5	3496.7	3456.7	2787.5	2377.7
22.5°	2472.8	2464.9	2437.3	2412.5	2415.9	2500.9	2769.4	3434.8	3568.1	2875.8	2399.6
25°	2761.6	2748.6	2691.1	2607.9	2554.9	2591.0	2781.8	3353.2	3674.5	2945.0	2388.9
27.5°	3123.0	3106.1	3032.3	2908.4	2787.5	2743.5	2871.3	3296.8	3763.0	2997.9	2365.8
30°	3477.0	3455.1	3382.4	3286.2	3109.4	2971.0	3032.9	3321.6	3868.1	3053.2	2335.5
32.5°	3859.2	3838.3	3742.1	3622.8	3476.4	3290.1	3254.1	3442.7	3997.1	3130.2	2314.0
35°	4342.7	4310.0	4173.3	4010.6	3855.2	3666.6	3553.6	3651.5	4168.8	3247.9	2325.8
37.5°	4893.2	4849.3	4701.9	4477.2	4274.6	4063.5	3918.3	3938.6	4420.4	3405.5	2362.4
40°	5412.2	5372.2	5236.0	5024.3	4769.9	4513.8	4359.0	4314.0	4767.7	3597.4	2426.6
42.5°	5723.5	5687.4	5630.0	5540.5	5326.1	5064.9	4869.6	4772.2	5178.6	3827.1	2504.9
45°	5740.9	5709.5	5786.5	5890.7	5848.4	5674.5	5436.4	5257.9	5591.2	4042.7	2586.0
47.5°	5461.7	5440.4	5674.5	6038.2	6219.4	6292.6	6073.0	5703.2	5931.8	4197.5	2619.2
50°	4700.8	4692.9	5174.6	5842.3	6360.6	6834.1	6744.6	6117.5	6195.7	4277.4	2587.6
52.5°	4075.9	4047.2	4328.1	5215.2	6155.2	7118.9	7400.9	6523.9	6380.4	4292.6	2513.9
55°	3091.4	3066.1	3418.5	4166.0	5492.7	7017.6	7881.0	6943.2	6512.6	4253.8	2381.6
57.5°	1658.2	1642.6	2087.7	2772.8	4293.7	6409.6	7967.7	7386.9	6624.1	4150.7	2196.4
60°	645.6	642.8	809.4	1345.3	2609.5	5214.6	7530.4	7653.1	6693.9	4024.2	2041.6
62.5°	390.6	399.1	426.1	604.0	1152.8	3239.4	6522.2	7350.3	6740.6	3908.1	1913.9
65°	323.1	323.7	327.1	414.8	552.2	1355.5	4910.1	6353.9	6625.2	3701.6	1732.6
67.5°	277.0	282.0	295.0	329.3	389.5	594.4	2826.8	4921.9	5923.3	3220.9	1450.0
70°	218.4	225.2	241.5	270.7	300.6	372.1	1044.7	3274.9	4525.1	2427.7	1096.5
72.5°	184.1	183.5	192.0	220.1	238.6	261.8	401.9	1835.1	2629.8	1159.0	542.6
75°	142.4	148.0	158.8	184.1	195.4	189.7	217.8	670.5	942.3	351.3	184.6
77.5°	111.4	115.9	125.6	150.3	161.5	134.5	125.6	239.7	302.8	126.1	83.3
80°	50.1	54.0	85.6	110.9	131.7	92.9	68.1	122.7	134.5	57.4	42.2
82.5°	9.0	15.2	50.1	58.5	67.5	60.3	35.5	63.7	65.9	23.1	14.7
85°	0.5	1.1	17.4	21.4	27.1	19.7	10.7	25.3	21.9	7.9	5.6
87.5°	0.0	0.0	0.0	0.5	0.5	2.8	3.4	4.5	3.4	2.8	2.3
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8	2199.8
2.5°	2164.3	2084.3	2006.7	1943.1	1906.0	1843.0	1801.2	1794.5	1777.0	1792.2
5°	2122.7	1979.7	1835.1	1705.6	1599.2	1461.9	1359.4	1316.0	1278.3	1291.3
7.5°	2103.0	1877.3	1652.1	1430.9	1203.5	983.9	820.7	752.6	700.8	708.1
10°	2076.5	1770.9	1417.9	1080.1	775.6	558.9	446.4	404.7	381.6	382.2
12.5°	2056.3	1643.7	1146.1	732.4	472.2	356.9	322.0	311.8	305.0	305.7
15°	2046.1	1493.9	877.5	488.0	337.7	302.3	293.9	289.4	284.8	284.2
17.5°	2029.2	1327.3	642.3	356.3	295.5	283.1	275.8	270.7	265.2	264.0
20°	2003.9	1138.2	469.4	301.1	277.0	267.4	257.3	250.5	243.7	242.6
22.5°	1957.1	938.4	360.8	278.6	263.4	252.8	240.4	232.5	225.7	224.6
25°	1870.5	750.9	303.9	264.6	251.6	238.6	225.2	214.4	208.3	207.2
27.5°	1760.7	589.9	275.8	251.6	236.4	224.6	209.4	199.3	193.6	192.5
30°	1631.3	454.3	259.5	237.0	218.4	208.3	194.7	186.3	183.0	183.0
32.5°	1491.7	363.1	252.8	222.3	202.6	191.4	180.7	177.3	176.2	175.6
35°	1360.5	315.2	249.4	210.5	188.6	177.8	173.3	173.9	176.2	176.2
37.5°	1243.9	300.0	247.6	202.0	176.2	166.7	169.4	174.5	172.2	172.2
40°	1138.8	301.8	246.5	195.9	166.0	160.4	166.0	162.2	156.5	155.9
42.5°	1058.2	315.8	244.3	190.9	159.9	155.9	153.6	147.5	146.9	148.0
45°	999.7	328.2	243.7	188.6	153.1	145.8	143.0	136.7	148.0	150.9
47.5°	930.5	328.2	243.7	180.7	141.9	139.0	134.5	127.8	139.0	141.9
50°	840.9	307.3	234.2	171.7	132.8	131.2	123.3	114.8	112.5	114.3
52.5°	727.9	269.6	209.9	159.3	123.8	120.4	110.9	104.7	103.0	103.0
55°	598.9	225.7	177.3	141.2	114.3	108.0	101.3	98.5	96.9	95.7
57.5°	486.9	185.2	142.4	125.6	105.3	97.4	95.1	91.7	89.0	87.2
60°	399.6	145.8	117.7	111.4	96.2	89.0	88.4	83.8	76.6	75.4
62.5°	308.4	106.9	99.1	96.9	87.2	81.1	79.9	70.9	59.7	57.4
65°	217.8	83.3	79.9	85.0	77.7	72.1	69.2	55.8	43.9	42.2
67.5°	153.1	69.8	63.0	74.3	67.5	60.3	58.5	47.3	36.6	35.5
70°	109.2	56.9	51.8	63.7	54.0	52.9	49.5	39.4	29.8	28.7
72.5°	77.1	43.4	40.0	55.1	37.1	45.6	40.5	30.4	22.5	21.4
75°	56.9	31.0	28.2	32.1	27.1	34.3	28.7	20.3	14.0	13.5
77.5°	41.6	19.7	16.9	15.8	15.8	21.4	15.8	8.4	6.1	5.6
80°	29.3	9.0	7.9	6.8	6.1	5.0	2.3	1.1	0.5	0.5
82.5°	17.4	3.9	3.9	2.8	1.6	0.0	0.0	0.0	0.0	0.0
85°	3.9	1.6	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	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

(END OF REPORT)