

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: P960833

Luminaire Tested: **NAV-SB1D-730-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960833
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-SB1D-730-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8896 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

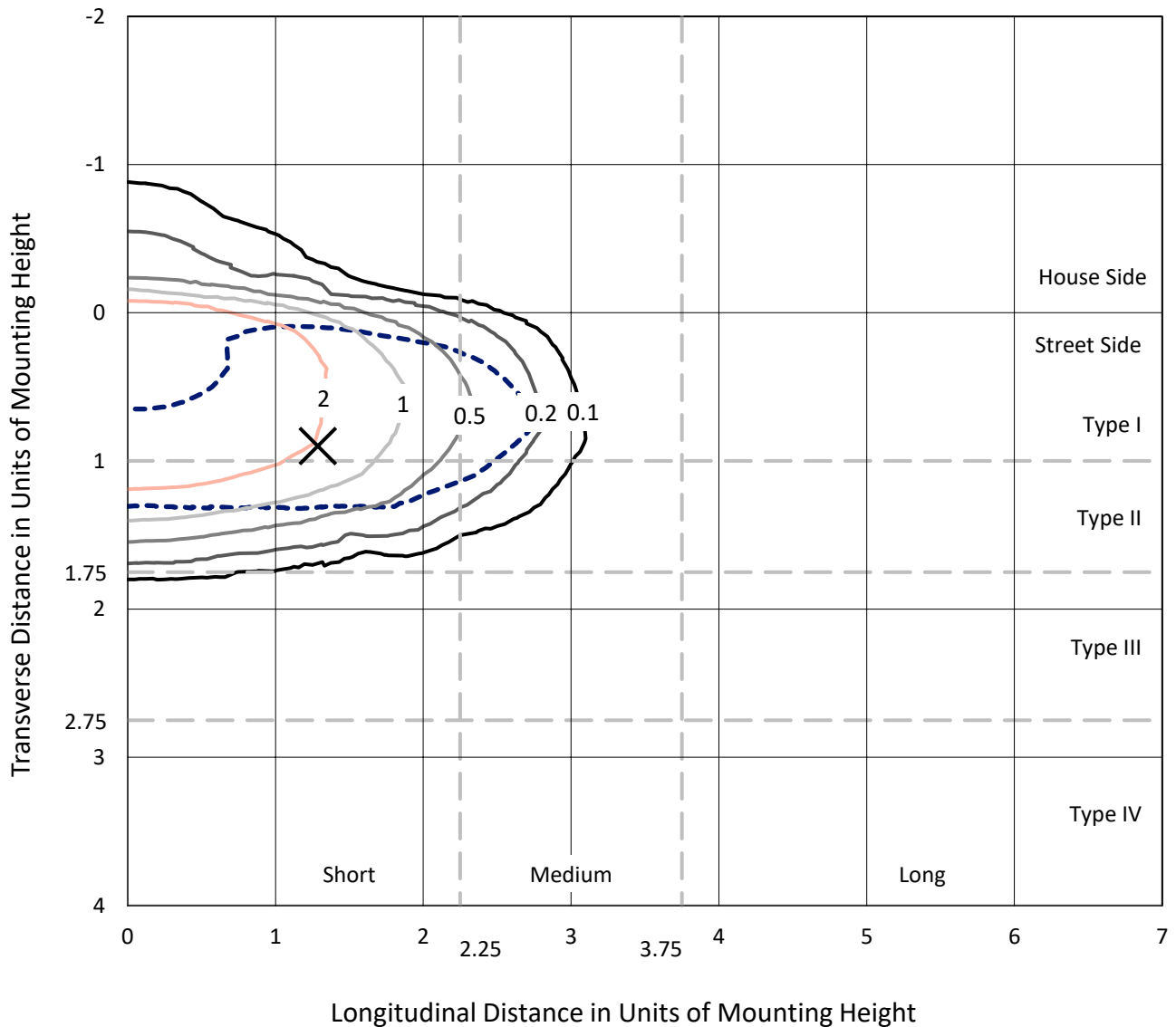
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

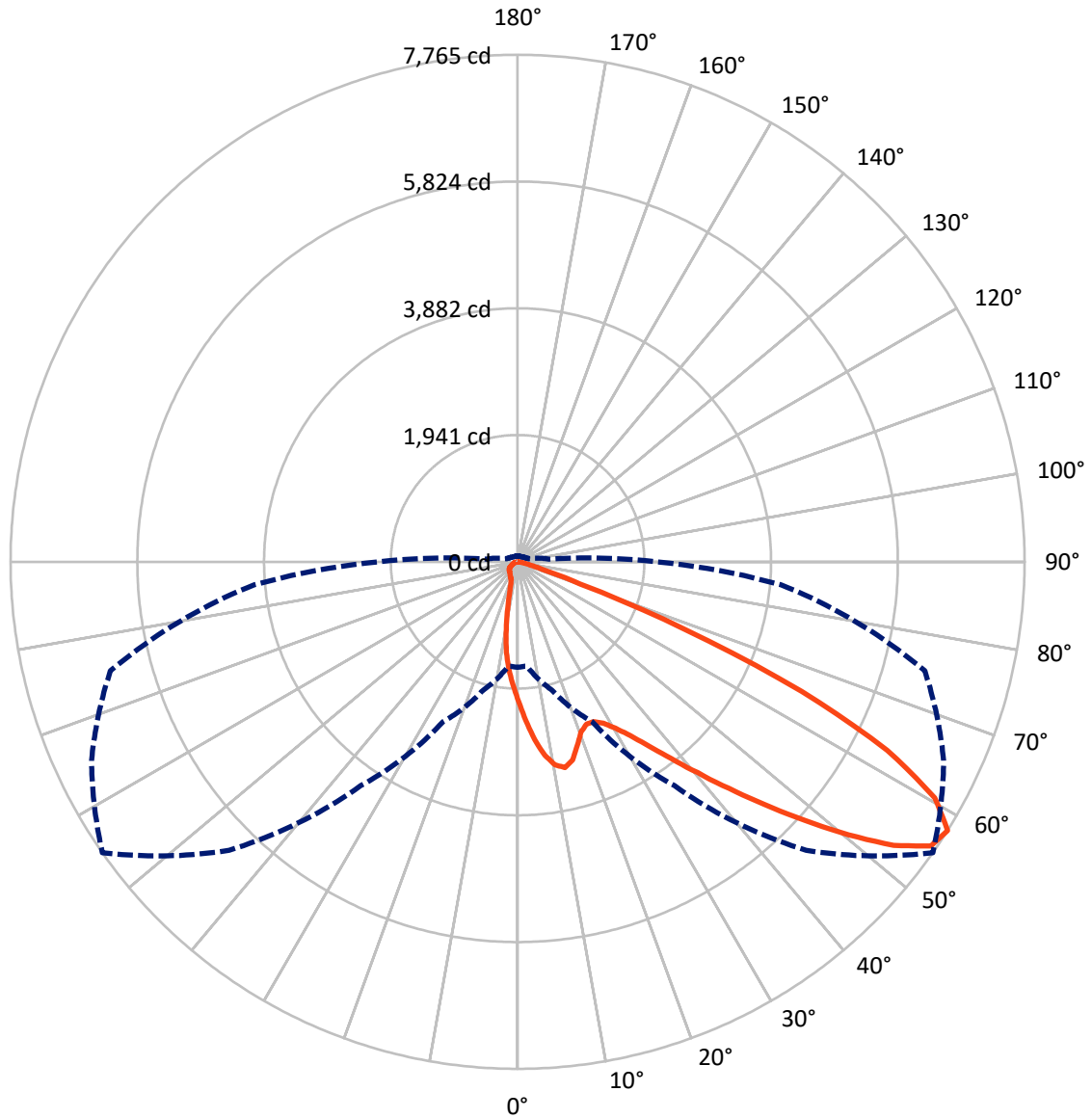
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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	694.7	0.0	694.7
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	8201.2	0.0	8201.2
	% Fixture	92.2	0.0	92.2
Total	Lumens	8896.0	0.0	8896.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.5	2.2
10°-20°	481.8	5.4
20°-30°	770.9	8.7
30°-40°	1304.7	14.7
40°-50°	2142.1	24.1
50°-60°	2354.3	26.5
60°-70°	1350.4	15.2
70°-80°	275.9	3.1
80°-90°	16.3	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°	8896.0	100.0
0°-180°	8896.0	100.0

Coefficient of Utilization



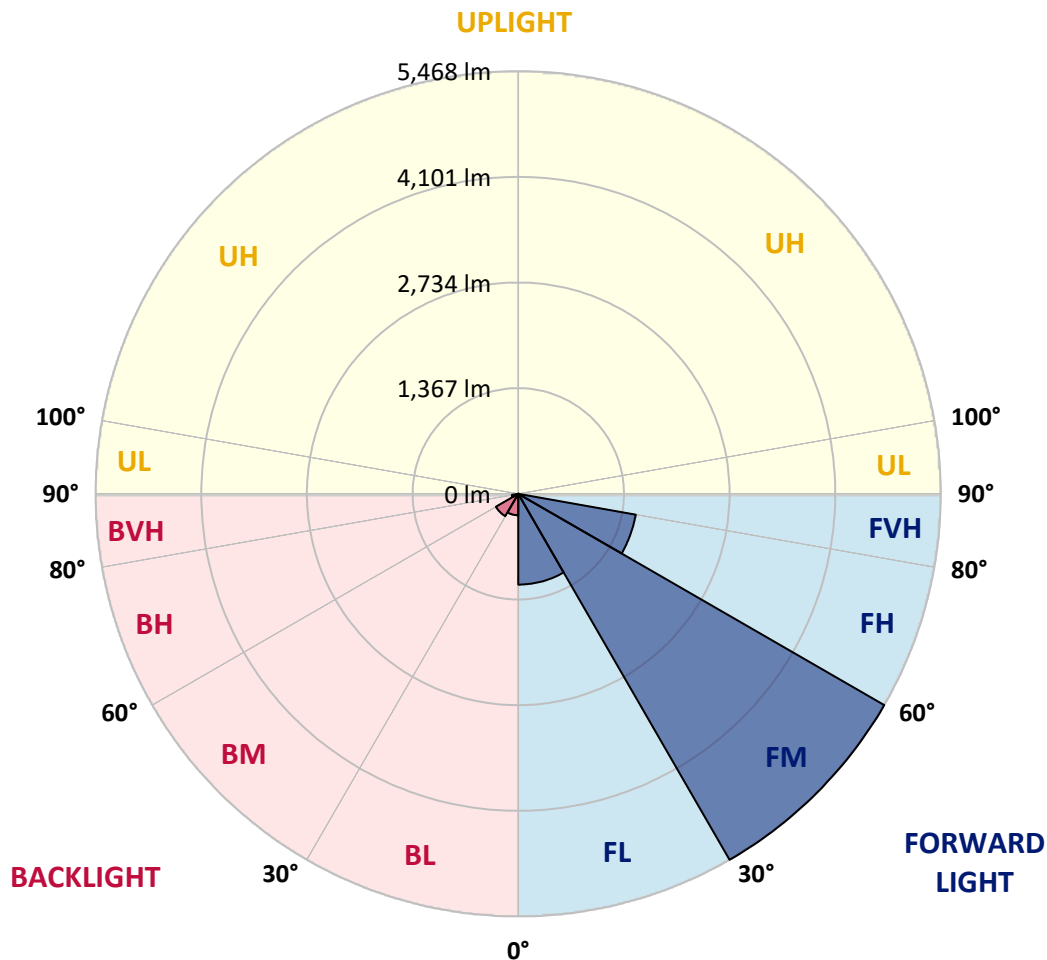
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1174.8	13.2			
FM (30°-60°)	5467.5	61.5			
FH (60°-80°)	1543.8	17.4			G1/1800
FVH (80°-90°)	15.2	0.2			G1/100
BL (0°-30°)	277.4	3.1	B1/500		
BM (30°-60°)	333.7	3.8	B1/1000		
BH (60°-80°)	82.6	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°	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7
2.5°	2659.9	2626.5	2621.5	2614.9	2551.3	2503.6	2434.5	2358.7	2273.8	2187.0	2148.6
5°	3073.0	3046.6	3041.7	3010.9	2938.6	2857.4	2734.5	2579.2	2420.7	2234.2	2154.1
7.5°	3153.0	3148.1	3170.6	3169.5	3159.7	3095.4	2991.8	2806.9	2568.9	2292.4	2168.4
10°	2795.9	2808.5	2875.4	2934.2	3092.7	3184.9	3162.3	3009.9	2721.4	2358.7	2184.3
12.5°	2470.7	2455.8	2503.6	2569.9	2754.3	3028.5	3233.2	3179.3	2895.7	2433.9	2207.8
15°	2266.6	2260.5	2287.4	2318.1	2458.6	2735.0	3150.8	3317.0	3063.6	2522.7	2243.5
17.5°	2201.3	2196.4	2204.6	2212.3	2303.4	2517.3	2955.0	3401.6	3224.3	2624.2	2283.1
20°	2254.5	2247.9	2246.8	2240.8	2278.7	2424.5	2777.9	3407.5	3368.6	2716.4	2317.0
22.5°	2409.8	2402.1	2375.2	2351.0	2354.3	2437.1	2698.8	3347.2	3477.2	2802.6	2338.4
25°	2691.1	2678.5	2622.6	2541.4	2489.8	2525.0	2710.9	3267.7	3580.9	2870.0	2328.0
27.5°	3043.3	3026.8	2955.0	2834.3	2716.4	2673.6	2798.1	3212.9	3667.0	2921.6	2305.5
30°	3388.3	3366.9	3296.2	3202.4	3030.2	2895.2	2955.6	3237.0	3769.6	2975.3	2275.9
32.5°	3760.8	3740.5	3646.7	3530.4	3387.8	3206.2	3171.1	3354.9	3895.2	3050.5	2255.1
35°	4232.0	4200.2	4066.9	3908.4	3756.9	3573.3	3463.0	3558.4	4062.5	3165.1	2266.6
37.5°	4768.5	4725.7	4582.0	4363.1	4165.6	3960.0	3818.4	3838.2	4307.8	3318.6	2302.3
40°	5274.2	5235.3	5102.6	4896.3	4648.4	4398.8	4247.9	4204.0	4646.1	3505.7	2364.8
42.5°	5577.6	5542.5	5486.5	5399.3	5190.3	4935.8	4745.4	4650.5	5046.6	3729.6	2441.0
45°	5594.6	5563.9	5639.0	5740.5	5699.4	5529.9	5297.8	5124.0	5448.7	3939.7	2520.0
47.5°	5322.5	5301.7	5529.9	5884.2	6060.8	6132.2	5918.2	5557.9	5780.6	4090.5	2552.4
50°	4580.9	4573.2	5042.8	5693.4	6198.6	6659.8	6572.6	5961.6	6037.9	4168.4	2521.7
52.5°	3972.0	3944.0	4217.8	5082.3	5998.3	6937.4	7212.3	6357.7	6217.8	4183.2	2449.8
55°	3012.6	2987.9	3331.4	4059.8	5352.7	6838.7	7680.1	6766.3	6346.7	4145.3	2320.9
57.5°	1616.0	1600.6	2034.5	2702.1	4184.3	6246.2	7764.7	7198.6	6455.2	4045.0	2140.4
60°	629.1	626.5	788.8	1311.0	2543.0	5081.7	7338.4	7458.0	6523.3	3921.5	1989.5
62.5°	380.7	388.9	415.2	588.6	1123.4	3156.9	6356.0	7162.9	6568.8	3808.6	1865.1
65°	314.9	315.4	318.7	404.3	538.1	1320.9	4784.9	6191.9	6456.4	3607.2	1688.4
67.5°	269.9	274.8	287.4	320.9	379.6	579.2	2754.8	4796.5	5772.3	3138.8	1413.1
70°	212.8	219.5	235.3	263.8	292.9	362.5	1018.1	3191.4	4409.8	2365.9	1068.6
72.5°	179.4	178.9	187.1	214.4	232.6	255.1	391.7	1788.2	2562.8	1129.4	528.8
75°	138.8	144.2	154.7	179.4	190.3	184.9	212.3	653.3	918.3	342.2	179.9
77.5°	108.6	113.0	122.3	146.5	157.4	131.1	122.3	233.7	295.1	122.9	81.2
80°	48.8	52.7	83.3	108.0	128.3	90.5	66.4	119.6	131.1	56.0	41.1
82.5°	8.8	14.8	48.8	57.1	65.8	58.7	34.5	62.0	64.2	22.4	14.2
85°	0.5	1.1	17.0	20.8	26.3	19.2	10.5	24.7	21.4	7.7	5.5
87.5°	0.0	0.0	0.0	0.5	0.5	2.8	3.3	4.4	3.3	2.8	2.2
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°	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7	2143.7
2.5°	2109.1	2031.2	1955.6	1893.6	1857.4	1795.9	1755.3	1748.8	1731.7	1746.6
5°	2068.6	1929.3	1788.2	1662.1	1558.4	1424.5	1324.7	1282.5	1245.8	1258.4
7.5°	2049.4	1829.4	1610.0	1394.4	1172.8	958.9	799.8	733.4	683.0	690.0
10°	2023.6	1725.7	1381.8	1052.7	755.9	544.7	435.0	394.4	371.9	372.5
12.5°	2003.9	1601.8	1116.8	713.6	460.2	347.8	313.8	303.9	297.4	297.9
15°	1993.9	1455.8	855.2	475.6	329.1	294.6	286.4	282.0	277.6	277.1
17.5°	1977.5	1293.4	625.9	347.3	288.0	275.9	268.8	263.8	258.4	257.3
20°	1952.8	1109.2	457.5	293.5	269.9	260.6	250.7	244.1	237.5	236.5
22.5°	1907.3	914.4	351.6	271.5	256.8	246.3	234.2	226.5	220.0	218.8
25°	1822.9	731.7	296.2	257.8	245.2	232.6	219.5	209.0	203.0	201.8
27.5°	1715.8	574.9	268.8	245.2	230.4	218.8	204.1	194.1	188.7	187.6
30°	1589.7	442.7	252.9	230.9	212.8	203.0	189.8	181.5	178.2	178.2
32.5°	1453.7	353.8	246.3	216.7	197.5	186.5	176.1	172.8	171.7	171.2
35°	1325.8	307.2	243.0	205.2	183.8	173.3	168.9	169.5	171.7	171.7
37.5°	1212.3	292.3	241.4	196.9	171.7	162.4	165.1	170.0	167.9	167.9
40°	1109.7	294.0	240.3	190.9	161.8	156.3	161.8	158.0	152.5	151.9
42.5°	1031.3	307.7	238.1	185.9	155.8	151.9	149.8	143.7	143.2	144.2
45°	974.3	319.8	237.5	183.8	149.2	142.1	139.3	133.2	144.2	147.0
47.5°	906.7	319.8	237.5	176.1	138.3	135.5	131.1	124.5	135.5	138.3
50°	819.5	299.5	228.2	167.3	129.5	127.8	120.1	111.9	109.7	111.3
52.5°	709.3	262.7	204.6	155.3	120.6	117.4	108.0	102.0	100.3	100.3
55°	583.6	220.0	172.8	137.7	111.3	105.4	98.7	96.0	94.3	93.3
57.5°	474.5	180.5	138.8	122.3	102.6	94.9	92.7	89.4	86.7	85.1
60°	389.5	142.1	114.6	108.6	93.8	86.7	86.1	81.7	74.6	73.5
62.5°	300.6	104.2	96.6	94.3	85.1	79.0	77.9	69.1	58.1	56.0
65°	212.3	81.2	77.9	82.8	75.7	70.2	67.4	54.3	42.7	41.1
67.5°	149.2	68.1	61.4	72.4	65.8	58.7	57.1	46.1	35.7	34.5
70°	106.4	55.5	50.4	62.0	52.7	51.6	48.3	38.4	29.1	28.0
72.5°	75.1	42.2	38.9	53.7	36.2	44.4	39.5	29.6	21.9	20.8
75°	55.5	30.1	27.5	31.3	26.3	33.4	28.0	19.8	13.7	13.1
77.5°	40.6	19.2	16.5	15.4	15.4	20.8	15.4	8.2	6.0	5.5
80°	28.5	8.8	7.7	6.6	6.0	4.9	2.2	1.1	0.5	0.5
82.5°	17.0	3.8	3.8	2.8	1.6	0.0	0.0	0.0	0.0	0.0
85°	3.8	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)