

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: P961887

Luminaire Tested: **NAV-SB2B-730-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961887  
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-730-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

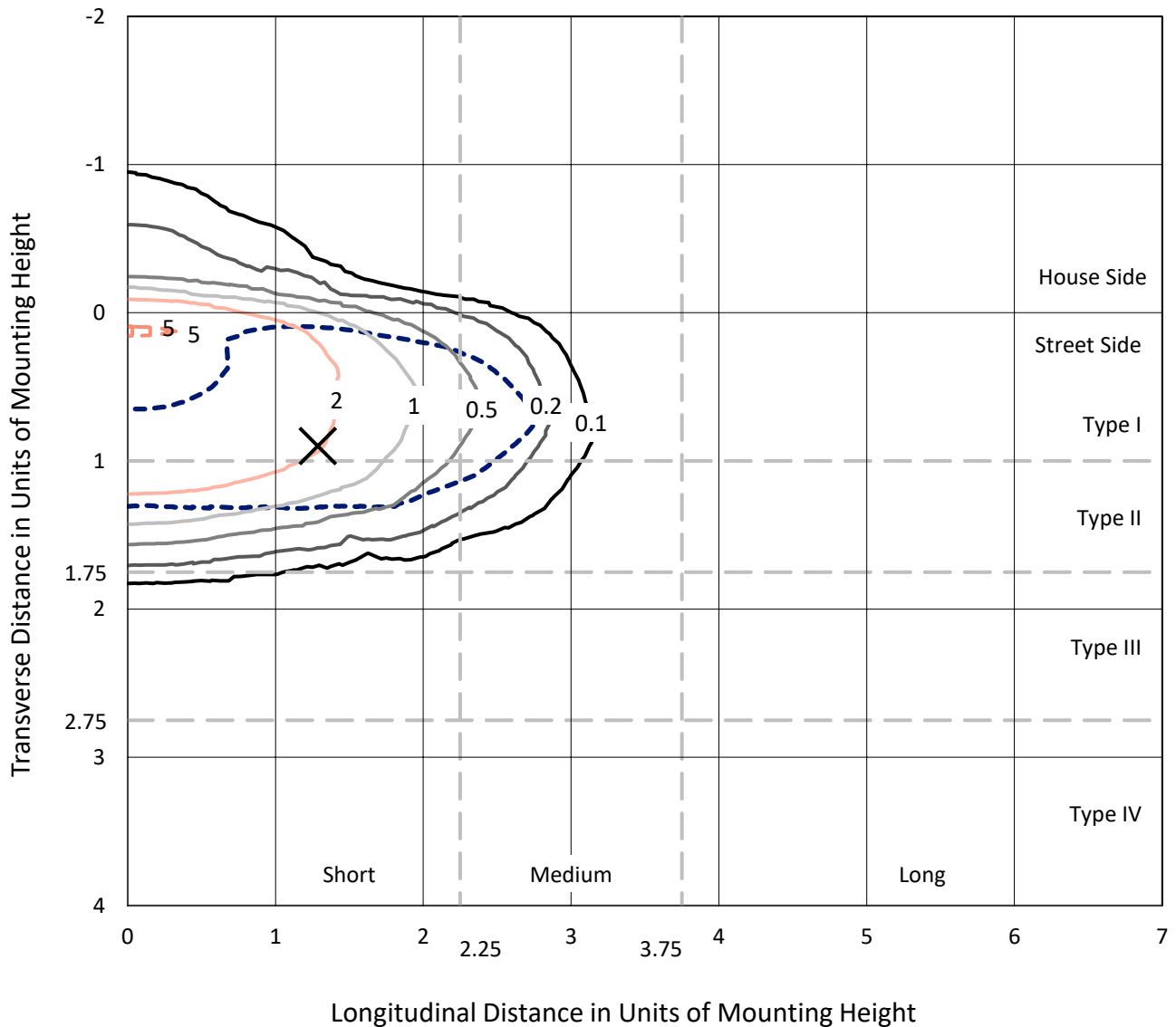
Lumens per Lamp: N/A  
Luminaire Lumens: 9841 lumens  
Efficiency: N/A  
Efficacy: 133.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 73.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

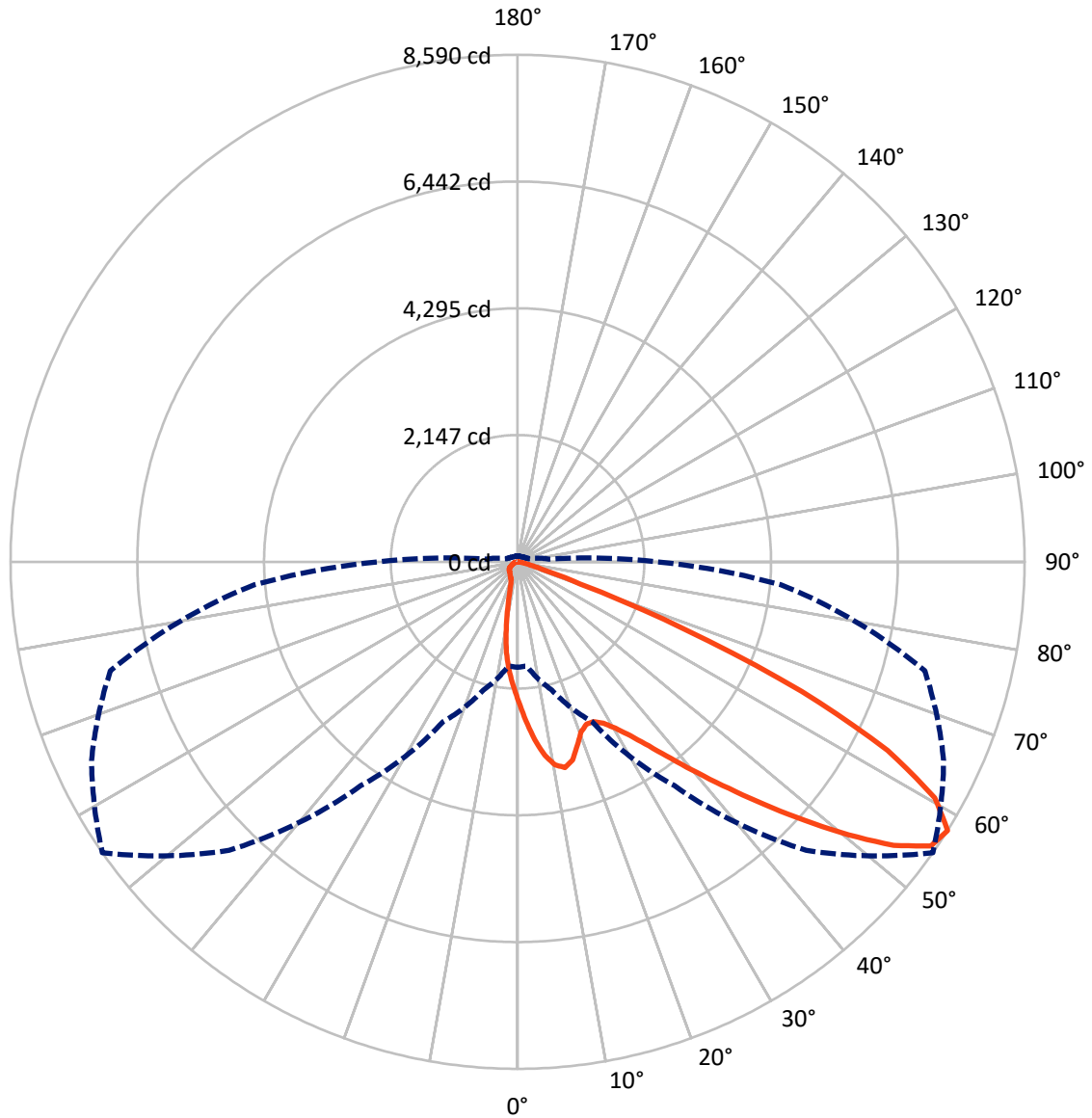
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 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
<b>House Side</b>	Lumens	768.5	0.0	768.5
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	9072.5	0.0	9072.5
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	9841.0	0.0	9841.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.6	2.2
10°-20°	533.0	5.4
20°-30°	852.8	8.7
30°-40°	1443.3	14.7
40°-50°	2369.7	24.1
50°-60°	2604.4	26.5
60°-70°	1493.9	15.2
70°-80°	305.2	3.1
80°-90°	18.0	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°	9841.0	100.0
0°-180°	9841.0	100.0

**Coefficient of Utilization**



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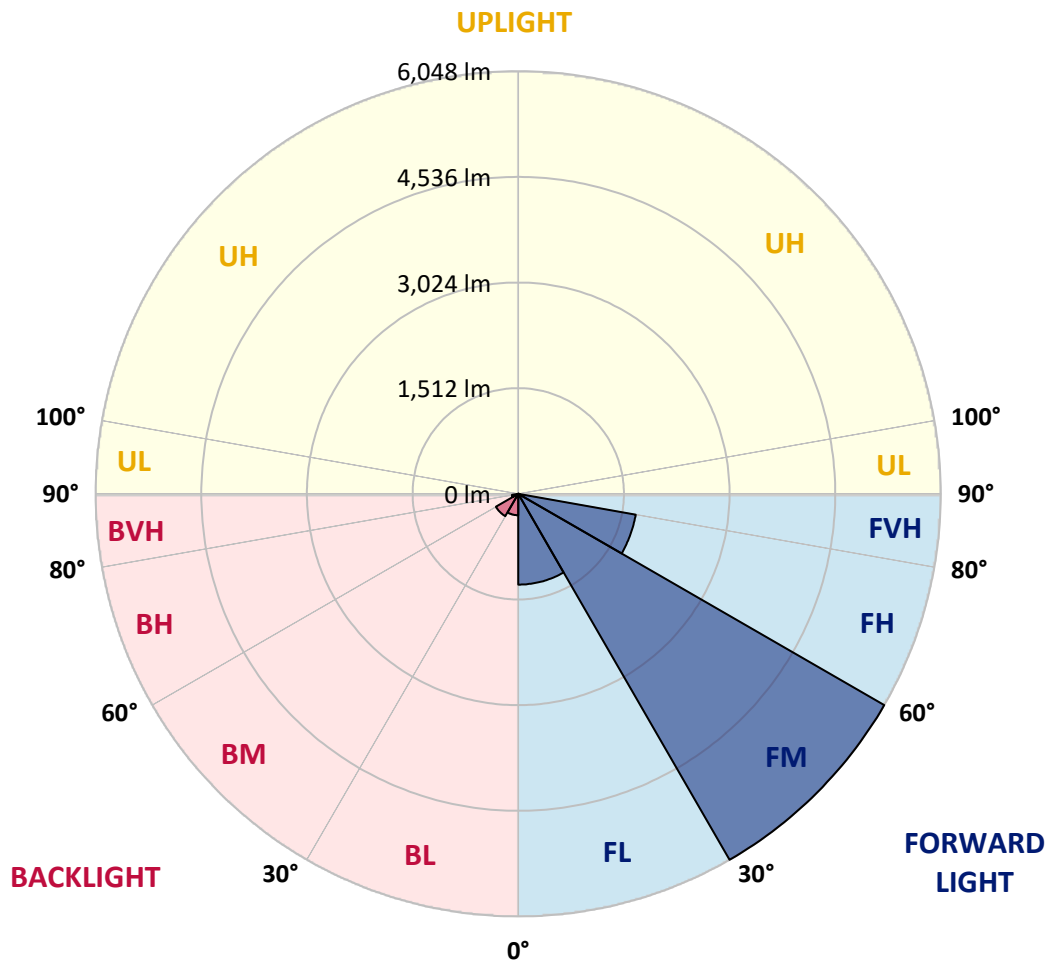
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1299.6	13.2			
FM (30°-60°)	6048.4	61.5			
FH (60°-80°)	1707.8	17.4			G1/1800
FVH (80°-90°)	16.8	0.2			G1/100
BL (0°-30°)	306.8	3.1	B1/500		
BM (30°-60°)	369.1	3.8	B1/1000		
BH (60°-80°)	91.4	0.9	B0/110		G0/110
BVH (80°-90°)	1.2	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°	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4
2.5°	2942.5	2905.5	2900.0	2892.7	2822.3	2769.5	2693.1	2609.3	2515.2	2419.4	2376.9
5°	3399.4	3370.3	3364.8	3330.8	3250.7	3160.9	3025.0	2853.3	2677.9	2471.6	2383.0
7.5°	3488.0	3482.5	3507.4	3506.2	3495.2	3424.3	3309.6	3105.1	2841.7	2535.8	2398.7
10°	3092.9	3106.9	3181.0	3245.9	3421.2	3523.2	3498.3	3329.6	3010.4	2609.3	2416.3
12.5°	2733.1	2716.8	2769.5	2842.9	3046.8	3350.2	3576.6	3517.1	3203.4	2692.5	2442.5
15°	2507.4	2500.7	2530.4	2564.4	2719.7	3025.6	3485.5	3669.4	3389.1	2790.8	2481.9
17.5°	2435.2	2429.7	2438.8	2447.3	2548.0	2784.7	3268.9	3762.9	3566.9	2903.0	2525.6
20°	2494.0	2486.8	2485.5	2478.9	2520.7	2682.1	3073.0	3769.5	3726.5	3005.0	2563.2
22.5°	2665.7	2657.2	2627.5	2600.8	2604.4	2696.1	2985.5	3702.8	3846.6	3100.2	2586.9
25°	2977.0	2963.1	2901.2	2811.4	2754.4	2793.2	2998.9	3614.8	3961.3	3174.8	2575.3
27.5°	3366.6	3348.5	3268.9	3135.5	3005.0	2957.6	3095.4	3554.1	4056.5	3231.9	2550.4
30°	3748.3	3724.6	3646.3	3542.6	3352.1	3202.8	3269.5	3580.8	4170.0	3291.4	2517.7
32.5°	4160.4	4137.9	4034.1	3905.5	3747.7	3546.8	3508.1	3711.3	4309.0	3374.5	2494.6
35°	4681.6	4646.4	4498.9	4323.6	4156.1	3952.8	3830.8	3936.4	4494.1	3501.3	2507.4
37.5°	5275.1	5227.7	5068.7	4826.6	4608.2	4380.6	4224.0	4245.9	4765.3	3671.2	2546.8
40°	5834.5	5791.5	5644.6	5416.4	5142.2	4866.1	4699.2	4650.6	5139.8	3878.2	2616.0
42.5°	6170.1	6131.2	6069.4	5972.9	5741.7	5460.2	5249.5	5144.6	5582.8	4125.7	2700.4
45°	6189.0	6154.9	6238.0	6350.4	6304.9	6117.3	5860.6	5668.2	6027.5	4358.2	2787.7
47.5°	5887.9	5864.8	6117.3	6509.4	6704.7	6783.7	6547.0	6148.3	6394.7	4525.1	2823.6
50°	5067.5	5059.0	5578.5	6298.1	6857.0	7367.4	7270.9	6594.8	6679.2	4611.2	2789.5
52.5°	4394.0	4363.0	4665.8	5622.1	6635.5	7674.4	7978.4	7033.0	6878.3	4627.6	2710.1
55°	3332.7	3305.3	3685.2	4491.0	5921.3	7565.2	8496.0	7485.1	7020.8	4585.7	2567.4
57.5°	1787.7	1770.7	2250.7	2989.2	4628.8	6909.8	8589.5	7963.2	7141.1	4474.6	2367.9
60°	696.0	693.0	872.6	1450.3	2813.2	5621.6	8118.0	8250.3	7216.3	4338.1	2200.9
62.5°	421.2	430.2	459.4	651.1	1242.8	3492.3	7031.2	7923.9	7266.6	4213.2	2063.2
65°	348.3	348.9	352.6	447.2	595.3	1461.2	5293.3	6849.8	7142.2	3990.4	1867.8
67.5°	298.6	304.0	318.0	355.0	419.9	640.8	3047.4	5306.0	6385.5	3472.2	1563.1
70°	235.4	242.7	260.3	291.9	324.0	401.1	1126.3	3530.5	4878.2	2617.2	1182.1
72.5°	198.4	197.8	206.9	237.3	257.3	282.2	433.3	1978.2	2835.0	1249.5	585.0
75°	153.5	159.6	171.1	198.4	210.5	204.5	234.8	722.7	1015.8	378.6	199.1
77.5°	120.1	125.0	135.3	162.1	174.1	145.0	135.3	258.5	326.5	135.9	89.8
80°	54.0	58.2	92.2	119.5	142.0	100.1	73.4	132.3	145.0	61.9	45.5
82.5°	9.7	16.4	54.0	63.1	72.8	64.9	38.2	68.6	71.0	24.9	15.8
85°	0.6	1.2	18.9	23.1	29.1	21.2	11.5	27.3	23.7	8.5	6.0
87.5°	0.0	0.0	0.0	0.6	0.6	3.1	3.7	4.8	3.7	3.1	2.5
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°	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4	2371.4
2.5°	2333.2	2247.0	2163.3	2094.7	2054.7	1986.8	1941.9	1934.6	1915.7	1932.1
5°	2288.3	2134.2	1978.2	1838.6	1723.9	1575.9	1465.4	1418.7	1378.1	1392.1
7.5°	2267.1	2023.8	1781.0	1542.5	1297.3	1060.7	884.8	811.3	755.5	763.4
10°	2238.6	1909.1	1528.6	1164.5	836.2	602.6	481.2	436.3	411.4	412.0
12.5°	2216.7	1771.9	1235.4	789.5	509.1	384.7	347.1	336.2	328.9	329.5
15°	2205.8	1610.5	946.1	526.1	364.1	325.8	316.7	311.9	307.1	306.5
17.5°	2187.6	1430.9	692.4	384.1	318.6	305.2	297.4	291.9	285.8	284.6
20°	2160.3	1227.0	506.0	324.6	298.6	288.2	277.4	270.0	262.7	261.6
22.5°	2109.9	1011.6	389.0	300.3	284.0	272.4	259.1	250.6	243.3	242.1
25°	2016.5	809.5	327.7	285.2	271.2	257.3	242.7	231.2	224.5	223.3
27.5°	1898.1	635.9	297.4	271.2	254.8	242.1	225.7	214.8	208.8	207.6
30°	1758.6	489.7	279.7	255.4	235.4	224.5	209.9	200.9	197.2	197.2
32.5°	1608.0	391.4	272.4	239.6	218.4	206.3	194.7	191.2	189.9	189.3
35°	1466.7	339.8	268.9	226.9	203.3	191.8	186.9	187.5	189.9	189.9
37.5°	1341.1	323.4	267.0	217.8	189.9	179.6	182.7	188.1	185.7	185.7
40°	1227.6	325.2	265.8	211.2	179.0	172.9	179.0	174.8	168.7	168.1
42.5°	1140.8	340.4	263.3	205.7	172.3	168.1	165.6	159.0	158.4	159.6
45°	1077.7	353.7	262.7	203.3	165.0	157.1	154.2	147.5	159.6	162.7
47.5°	1003.1	353.7	262.7	194.7	152.9	149.9	145.0	137.8	149.9	152.9
50°	906.6	331.3	252.5	185.1	143.2	141.3	132.9	123.8	121.4	123.2
52.5°	784.6	290.7	226.3	171.7	133.5	129.9	119.5	112.9	111.0	111.0
55°	645.6	243.3	191.2	152.3	123.2	116.5	109.3	106.2	104.3	103.1
57.5°	524.9	199.7	153.5	135.3	113.5	105.0	102.6	98.9	95.8	94.1
60°	430.8	157.1	126.8	120.1	103.7	95.8	95.2	90.4	82.5	81.3
62.5°	332.5	115.3	106.8	104.3	94.1	87.4	86.2	76.5	64.4	61.9
65°	234.8	89.8	86.2	91.6	83.7	77.7	74.6	60.1	47.4	45.5
67.5°	165.0	75.2	68.0	80.1	72.8	64.9	63.1	50.9	39.5	38.2
70°	117.8	61.3	55.9	68.6	58.2	57.0	53.4	42.4	32.2	31.0
72.5°	83.1	46.7	43.0	59.4	40.1	49.2	43.7	32.8	24.3	23.1
75°	61.3	33.4	30.3	34.5	29.1	37.0	31.0	21.8	15.2	14.6
77.5°	44.9	21.2	18.2	17.0	17.0	23.1	17.0	9.1	6.7	6.0
80°	31.6	9.7	8.5	7.3	6.7	5.4	2.5	1.2	0.6	0.6
82.5°	18.9	4.2	4.2	3.1	1.8	0.0	0.0	0.0	0.0	0.0
85°	4.2	1.8	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	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)