

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: P959796

Luminaire Tested: **NAV-SB1B-730-U-T2U-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959796  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-730-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

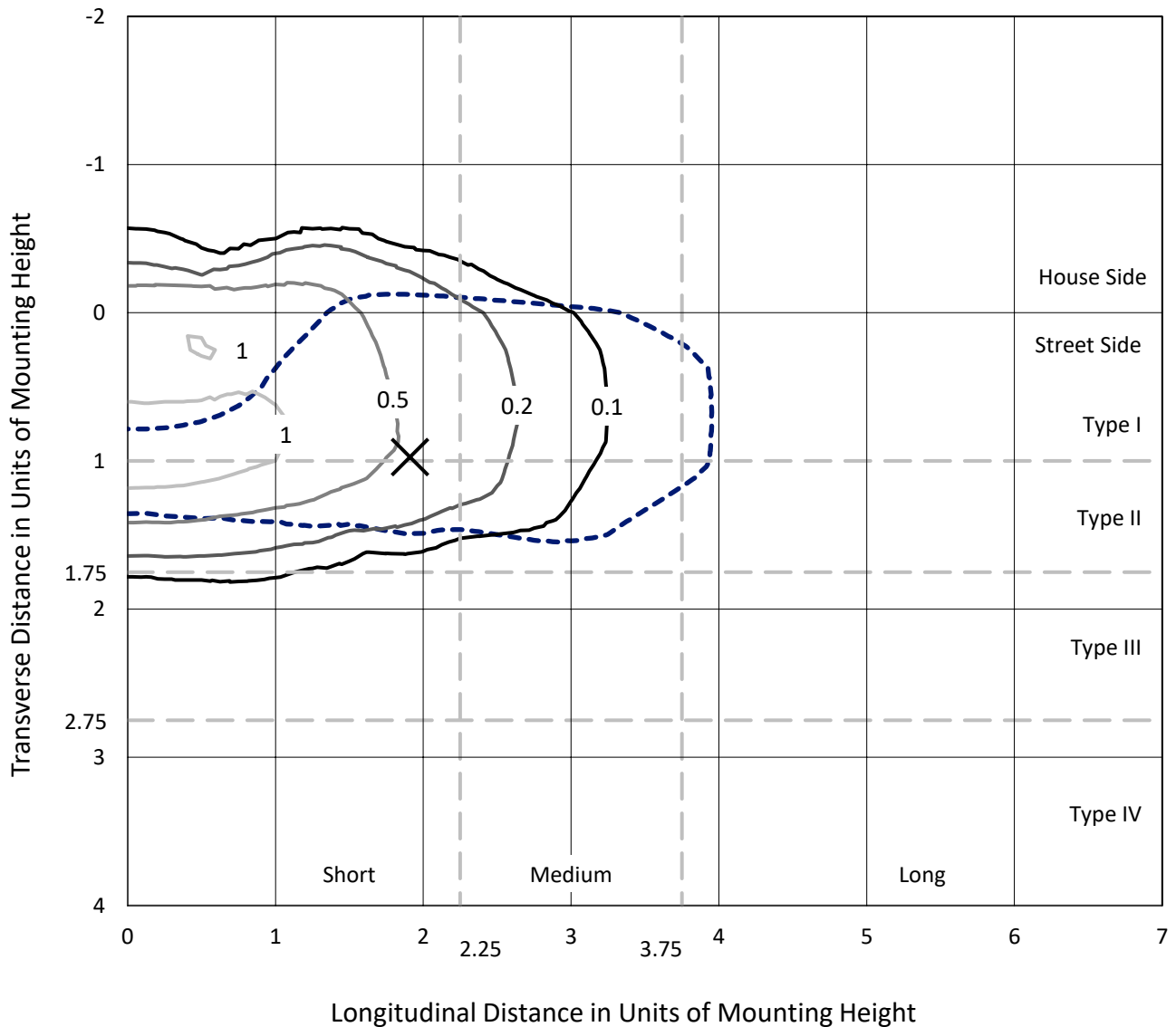
Lumens per Lamp: N/A  
Luminaire Lumens: 4412.6 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): NR  
Input Current (Ain): 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

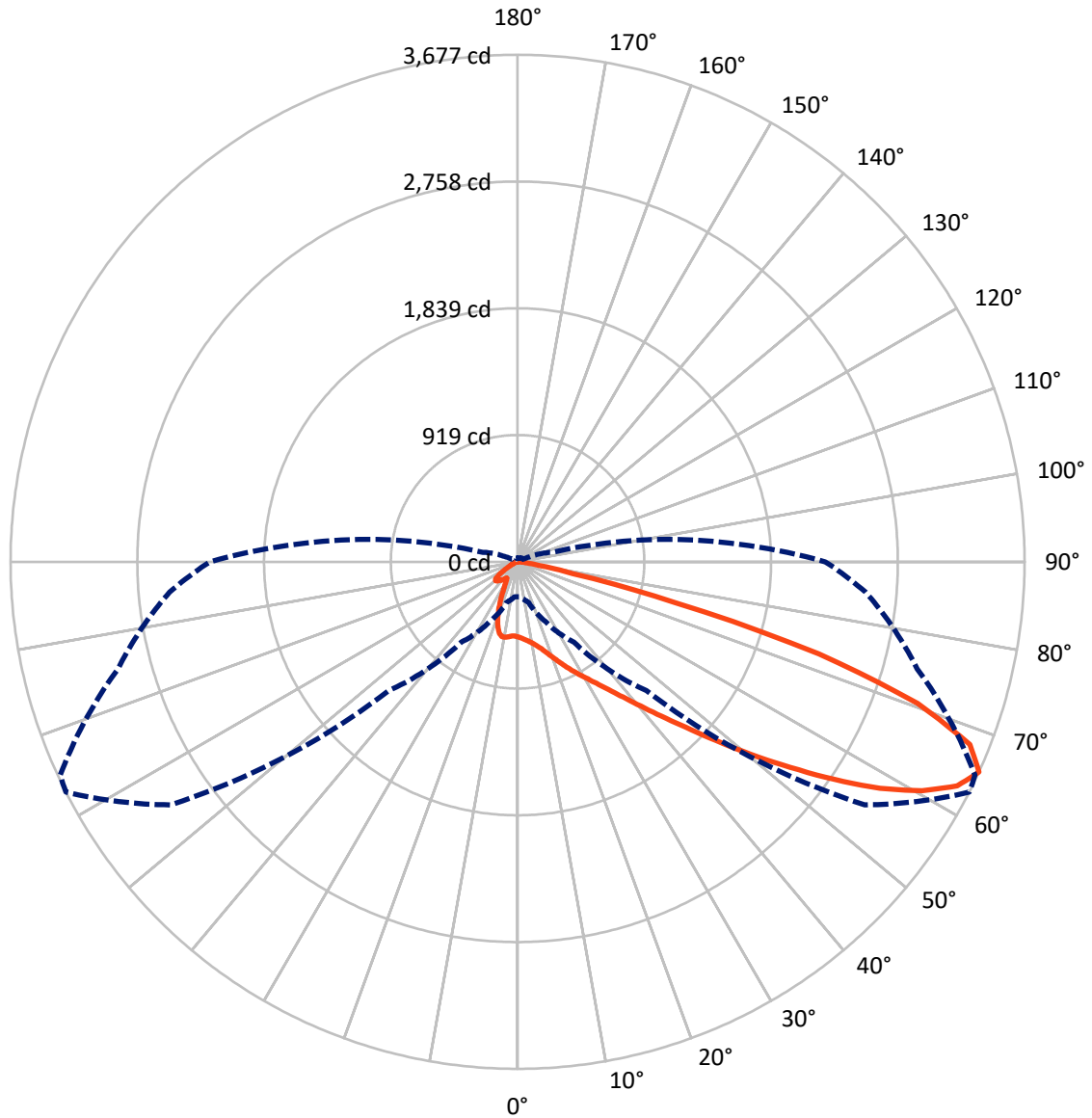
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	648.6	0.0	648.6
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	3764.0	0.0	3764.0
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	4412.6	0.0	4412.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.3	1.2
10°-20°	142.4	3.2
20°-30°	247.9	5.6
30°-40°	446.8	10.1
40°-50°	886.2	20.1
50°-60°	1207.1	27.4
60°-70°	963.5	21.8
70°-80°	436.0	9.9
80°-90°	31.3	0.7
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°	4412.6	100.0
0°-180°	4412.6	100.0

**Coefficient of Utilization**



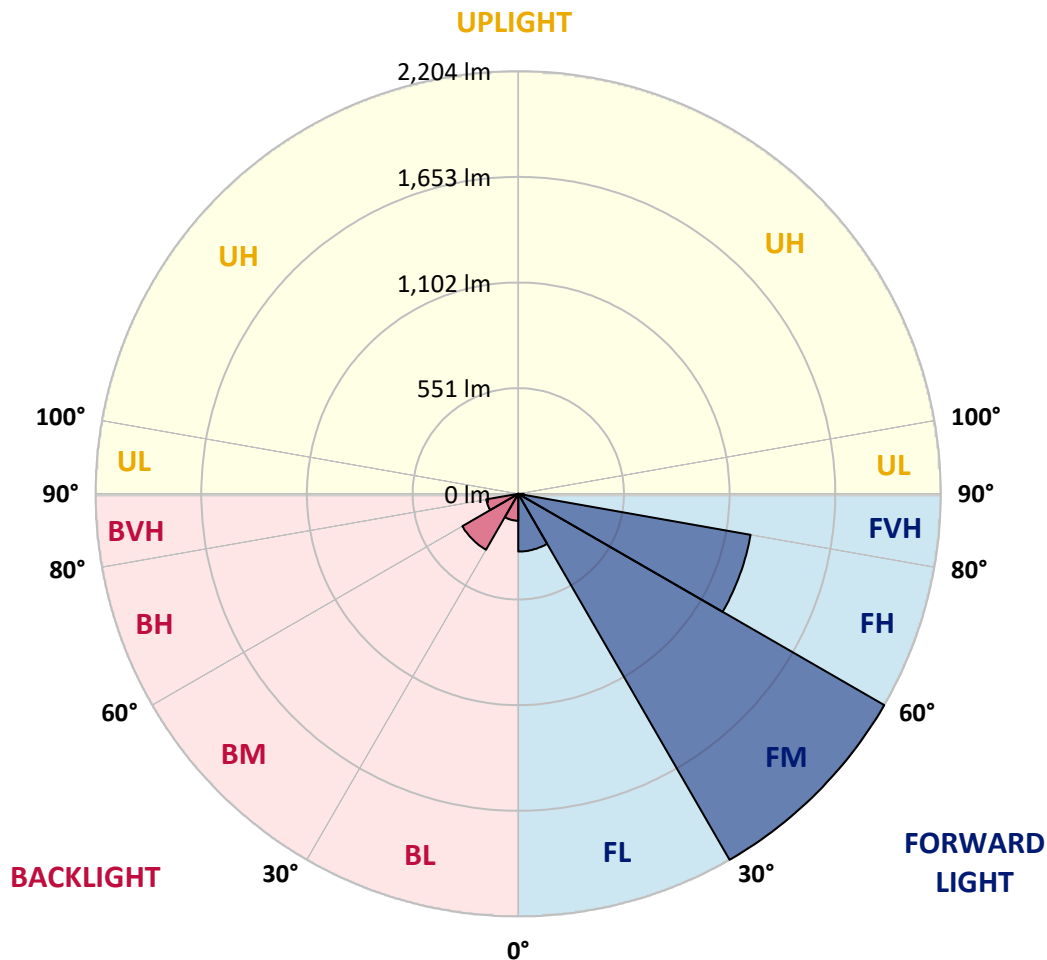
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	301.2	6.8			
FM (30°-60°)	2203.6	49.9			
FH (60°-80°)	1230.2	27.9			G1/1800
FVH (80°-90°)	29.0	0.7			G1/100
BL (0°-30°)	140.4	3.2	B1/500		
BM (30°-60°)	336.6	7.6	B1/1000		
BH (60°-80°)	169.3	3.8	B1/500		G1/500
BVH (80°-90°)	2.3	0.1			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°	63°	65°	75°	85°
0°	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6
2.5°	557.4	555.9	557.9	557.1	556.5	555.2	554.6	554.0	552.8	551.9	548.3
5°	558.8	557.9	560.1	561.9	563.8	565.6	566.4	567.6	566.4	564.1	560.4
7.5°	546.1	545.5	550.0	555.6	563.8	570.7	578.3	582.5	582.8	581.9	578.0
10°	545.2	543.7	548.3	554.9	565.6	578.0	591.3	600.4	601.7	605.6	601.4
12.5°	559.4	557.9	564.4	571.6	582.5	595.6	612.0	624.7	626.6	632.0	629.0
15°	583.4	581.4	588.7	598.0	612.0	626.9	644.2	655.7	657.2	663.9	658.5
17.5°	611.4	609.3	617.8	627.8	643.0	663.3	683.4	696.1	697.9	702.1	692.2
20°	647.2	644.5	651.2	660.3	676.4	700.6	724.6	742.8	742.5	742.5	726.1
22.5°	688.8	684.5	690.3	697.6	712.8	742.2	774.1	795.6	795.6	787.2	760.1
25°	733.4	729.2	735.5	742.2	755.6	788.9	826.4	853.0	854.2	839.7	796.5
27.5°	789.2	783.8	788.6	796.5	804.4	838.4	882.7	913.8	914.3	891.9	831.2
30°	896.8	881.3	866.1	857.6	861.2	894.9	942.3	976.6	979.6	948.6	868.8
32.5°	1093.5	1090.4	1037.0	967.2	930.7	955.6	1008.8	1050.0	1051.9	1012.1	917.7
35°	1399.1	1395.5	1309.6	1176.6	1057.9	1037.0	1089.5	1138.4	1137.1	1092.2	981.1
37.5°	1764.0	1760.7	1647.5	1469.5	1277.5	1159.9	1193.6	1245.0	1252.6	1193.6	1063.1
40°	2075.8	2063.3	1991.7	1820.2	1568.9	1364.0	1341.7	1375.8	1383.6	1313.8	1167.3
42.5°	2312.0	2301.3	2264.9	2157.7	1921.6	1665.7	1516.3	1529.4	1538.2	1454.4	1286.8
45°	2434.3	2431.9	2446.5	2436.4	2281.0	2036.1	1765.9	1711.5	1714.8	1610.2	1422.5
47.5°	2451.6	2450.4	2516.9	2611.0	2590.1	2453.7	2086.1	1938.6	1926.8	1785.9	1570.1
50°	2349.6	2347.1	2474.7	2651.1	2796.5	2804.7	2449.8	2194.5	2168.4	1967.7	1723.9
52.5°	2023.9	2023.2	2232.8	2526.3	2869.0	3111.9	2809.2	2475.6	2431.9	2160.2	1886.7
55°	1557.3	1568.6	1808.6	2155.7	2736.6	3259.7	3131.9	2787.7	2720.6	2353.9	2036.7
57.5°	1103.2	1119.6	1357.0	1665.9	2326.2	3172.3	3350.2	3100.3	3028.1	2546.9	2188.7
60°	592.6	607.1	844.8	1213.7	1730.6	2846.2	3465.2	3371.7	3303.5	2730.3	2325.9
62.5°	353.0	357.9	456.2	783.5	1170.6	2174.4	3416.3	3578.5	3522.3	2884.2	2445.2
65°	253.5	254.4	303.9	478.5	710.6	1321.1	3073.7	3677.4	3660.2	3000.2	2533.6
67.5°	213.4	212.8	233.5	317.9	484.2	661.7	2355.7	3537.5	3611.0	3073.7	2583.7
70°	183.1	184.0	208.3	232.9	364.0	374.6	1171.2	3080.0	3236.6	3093.0	2580.6
72.5°	136.3	139.3	161.8	212.2	274.7	257.7	404.4	2283.7	2567.0	2914.3	2446.8
75°	96.2	97.8	113.9	178.5	204.9	187.6	206.4	1180.6	1543.6	2234.3	2002.6
77.5°	74.1	76.8	86.2	124.7	201.8	131.7	126.3	408.6	627.8	1349.6	1373.1
80°	40.1	44.9	62.2	90.2	141.8	93.2	62.5	162.7	212.8	631.1	529.4
82.5°	20.6	23.1	43.5	65.0	80.8	81.4	31.0	67.6	87.7	194.9	72.6
85°	8.2	10.0	29.1	35.8	41.6	40.1	13.9	27.4	31.6	54.0	22.1
87.5°	1.8	3.1	10.7	8.2	7.9	8.5	3.4	6.4	6.0	6.4	4.0
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6	544.6
2.5°	548.0	546.7	543.4	539.8	535.5	533.1	531.6	531.3	529.1	527.6	529.1
5°	557.1	555.9	549.5	541.9	533.7	527.3	521.2	515.8	507.9	506.4	505.7
7.5°	575.2	571.9	561.6	551.2	535.8	517.3	494.8	469.0	446.0	439.0	435.6
10°	597.7	593.2	580.2	561.9	527.6	477.2	422.9	372.5	332.4	321.1	316.9
12.5°	623.2	619.3	602.0	568.3	493.3	401.9	318.8	256.2	217.4	207.7	204.9
15°	653.5	647.8	623.8	558.5	431.9	305.3	218.8	181.8	167.9	166.0	164.2
17.5°	685.7	676.4	643.3	523.7	349.4	217.1	169.1	158.5	152.4	150.6	149.6
20°	715.2	703.0	654.8	470.9	261.1	169.1	151.5	144.5	139.0	136.9	135.7
22.5°	744.7	727.3	654.8	398.9	195.8	150.0	139.0	132.6	126.3	123.5	122.1
25°	775.3	752.2	643.3	318.8	157.5	137.6	127.2	120.2	114.8	111.4	110.2
27.5°	805.0	773.2	616.8	242.8	140.2	126.6	116.2	109.6	104.4	102.0	102.0
30°	833.3	793.9	579.8	184.3	129.0	115.9	106.3	100.4	95.3	92.9	93.2
32.5°	871.6	819.9	540.4	151.2	119.3	106.0	97.2	91.6	87.1	85.3	85.3
35°	924.7	858.5	506.4	148.4	111.1	97.8	89.0	83.7	79.2	77.7	77.7
37.5°	1000.0	920.8	488.4	166.7	104.4	90.5	82.3	76.8	72.6	71.3	71.0
40°	1092.9	1005.1	498.2	184.9	99.8	84.0	76.2	70.7	67.1	65.6	65.3
42.5°	1203.0	1109.3	551.9	198.8	96.9	78.6	70.4	64.4	61.9	61.3	61.3
45°	1329.6	1223.6	634.2	213.7	91.9	73.5	64.7	60.1	58.3	58.0	57.7
47.5°	1473.5	1349.3	729.5	232.3	87.1	68.6	60.1	57.1	55.6	54.9	54.9
50°	1616.2	1475.9	827.5	242.5	83.1	64.1	56.5	54.0	52.8	52.5	52.5
52.5°	1765.6	1606.2	906.7	232.9	79.8	60.4	53.4	51.6	50.4	50.1	50.1
55°	1907.9	1711.5	920.4	197.6	73.2	56.8	50.1	49.2	47.7	47.7	47.4
57.5°	2030.5	1764.3	823.9	145.1	66.5	51.4	46.7	45.8	44.6	44.3	44.0
60°	2143.2	1749.2	636.0	97.8	59.2	45.8	42.5	41.9	40.7	39.2	38.8
62.5°	2206.6	1682.3	435.0	63.8	51.9	40.1	37.6	37.3	34.6	31.6	31.0
65°	2230.6	1545.2	271.4	46.4	43.5	34.3	32.5	31.9	27.9	24.6	24.3
67.5°	2209.7	1319.3	136.9	36.7	34.3	28.5	26.8	26.8	24.0	20.9	20.6
70°	2125.8	989.0	57.7	29.4	26.4	21.8	21.8	23.1	20.3	17.0	16.7
72.5°	1944.0	665.4	30.6	22.4	19.8	15.5	17.9	18.9	16.1	12.7	12.7
75°	1545.5	405.9	21.2	16.7	12.4	11.0	13.6	14.2	11.0	8.5	8.2
77.5°	1057.0	233.2	14.2	10.7	7.9	6.4	9.4	8.8	5.7	4.0	4.2
80°	464.1	97.2	8.2	4.8	3.1	2.5	3.4	2.5	1.8	1.2	1.2
82.5°	54.3	22.8	3.1	1.8	1.2	0.6	0.3	0.0	0.0	0.0	0.0
85°	11.3	2.8	1.5	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	0.6	0.3	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)