

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: P883438

Luminaire Tested: **NAV-SB3D-740-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3D-740-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

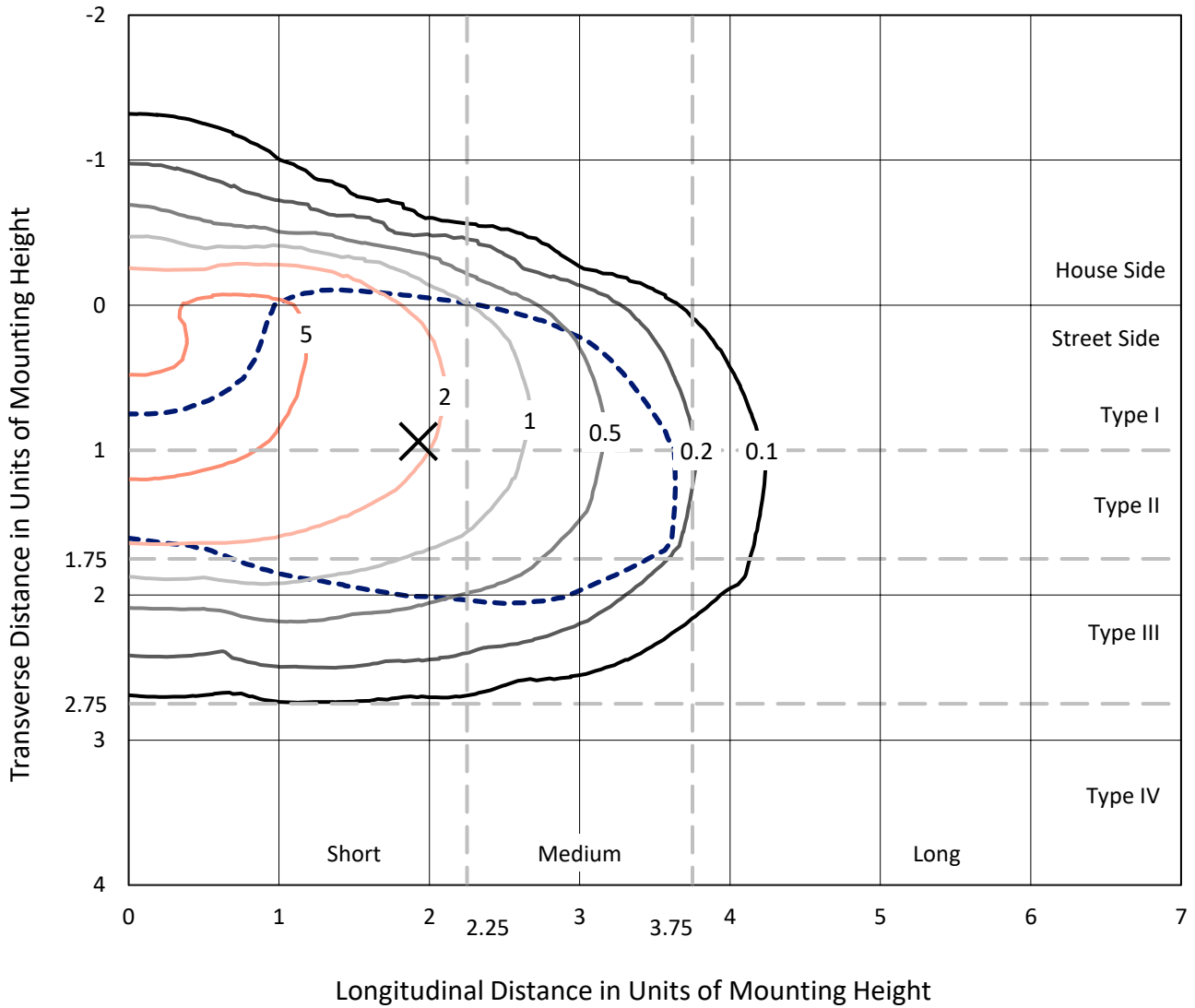
Lumens per Lamp: N/A  
Luminaire Lumens: 25808 lumens  
Efficiency: N/A  
Efficacy: 118.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
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

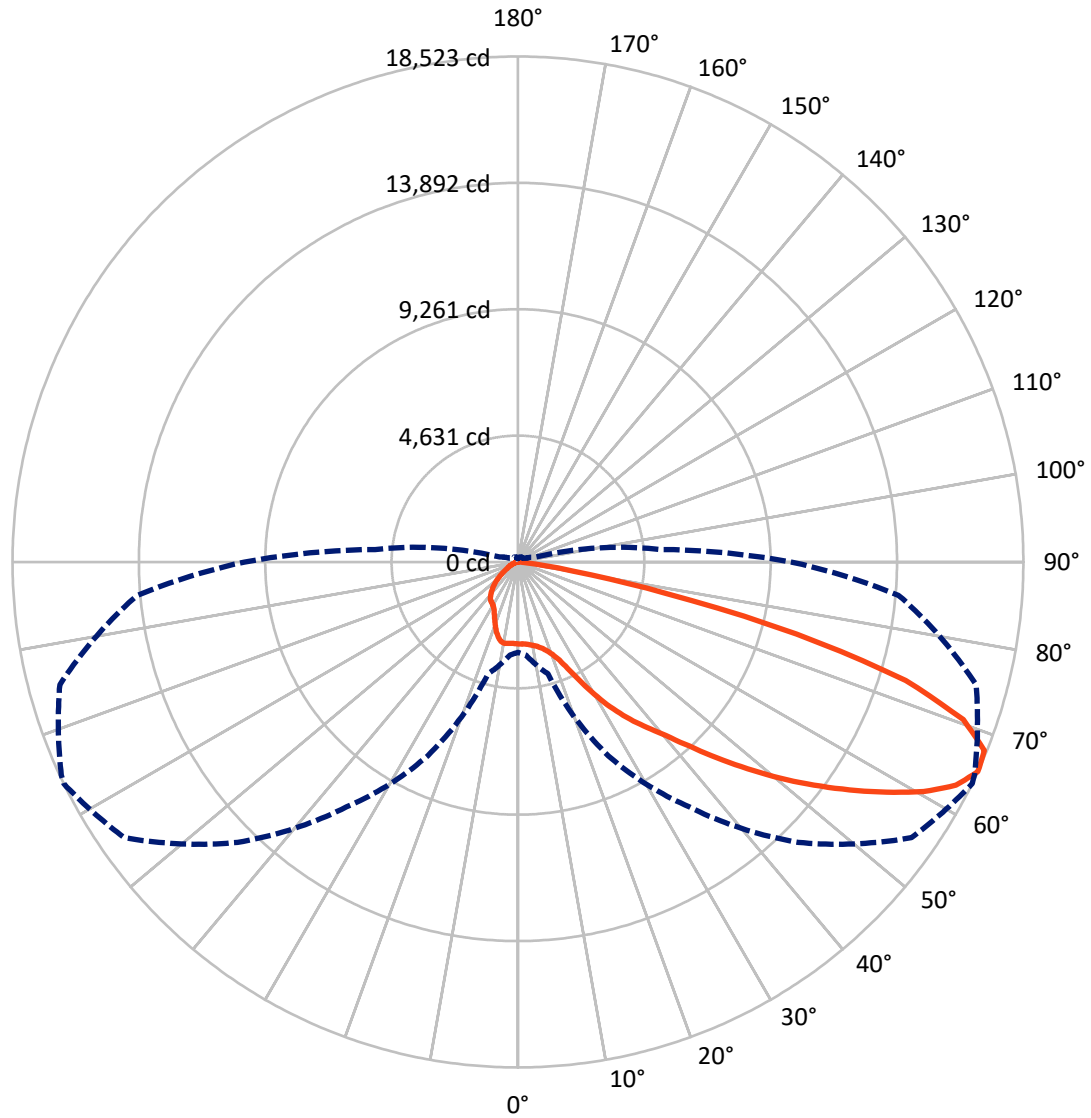
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3451.3	0.0	3451.3
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	22356.7	0.0	22356.7
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	25808.0	0.0	25808.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.9	1.1
10°-20°	751.1	2.9
20°-30°	1423.3	5.5
30°-40°	2880.2	11.2
40°-50°	4906.4	19.0
50°-60°	6672.4	25.9
60°-70°	6265.7	24.3
70°-80°	2510.3	9.7
80°-90°	121.6	0.5
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°	25808.0	100.0
0°-180°	25808.0	100.0

**Coefficient of Utilization**



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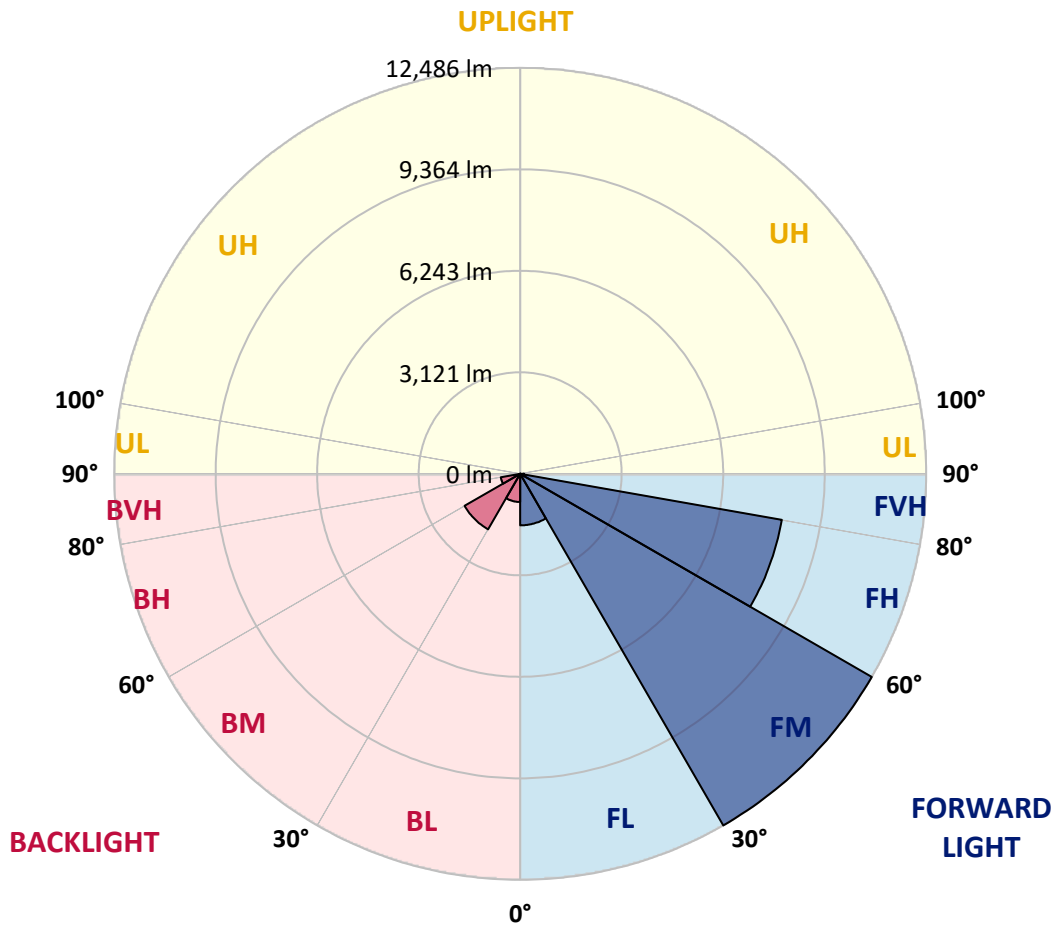
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1584.9	6.1			
FM (30°-60°)	12485.9	48.4			
FH (60°-80°)	8170.2	31.7			G4/12000
FVH (80°-90°)	115.7	0.4			G2/225
BL (0°-30°)	866.5	3.4	B2/1000		
BM (30°-60°)	1973.1	7.6	B2/2500		
BH (60°-80°)	605.8	2.3	B2/1000		G2/1000
BVH (80°-90°)	5.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7
2.5°	2991.4	3012.1	3006.9	3001.7	3000.0	3003.5	3005.2	3003.5	3003.5	3003.5	3005.2
5°	2934.3	2951.6	2951.6	2963.7	2981.0	3001.7	3017.3	3020.8	3024.2	3029.4	3027.7
7.5°	2825.3	2839.1	2849.5	2889.3	2932.5	2987.9	3034.6	3058.8	3062.3	3081.3	3088.2
10°	2750.9	2768.2	2785.5	2827.0	2889.3	2972.3	3051.9	3110.7	3119.4	3164.4	3185.1
12.5°	2747.4	2764.7	2787.2	2832.2	2904.9	2993.1	3090.0	3174.7	3190.3	3256.1	3299.3
15°	2783.7	2804.5	2825.3	2880.6	2958.5	3065.8	3169.6	3275.1	3290.7	3384.1	3430.8
17.5°	2858.1	2885.8	2901.4	2956.8	3039.8	3159.2	3295.9	3417.0	3430.8	3539.8	3598.6
20°	3005.2	3038.1	3043.3	3088.2	3169.6	3297.6	3460.2	3610.7	3628.0	3752.6	3818.3
22.5°	3309.7	3356.4	3314.9	3337.4	3410.0	3538.1	3714.5	3904.9	3929.1	4070.9	4129.8
25°	3846.0	3911.8	3804.5	3766.4	3797.6	3930.8	4152.3	4392.7	4420.4	4534.6	4564.0
27.5°	4899.7	4814.9	4652.3	4493.1	4399.7	4475.8	4724.9	5022.5	5057.1	5167.8	5133.2
30°	6057.1	5982.7	5763.0	5410.0	5188.6	5176.5	5406.6	5738.8	5778.6	5884.1	5778.6
32.5°	7216.3	7145.3	6906.6	6472.3	6088.3	5897.9	6057.1	6425.6	6446.4	6513.9	6358.1
35°	8356.4	8283.8	8045.0	7600.4	7128.0	6695.5	6664.4	7079.6	7086.5	7157.5	6925.6
37.5°	9503.5	9442.9	9188.6	8752.6	8287.2	7690.3	7401.4	7699.0	7707.6	7776.8	7536.4
40°	10321.8	10347.8	10173.0	9835.7	9436.0	8783.8	8228.4	8358.2	8306.3	8422.2	8278.6
42.5°	11024.3	11076.2	10923.9	10754.4	10522.5	9948.1	9252.6	9230.1	9147.1	9209.4	9060.6
45°	11631.5	11674.8	11538.1	11498.3	11493.1	11090.0	10372.0	10237.1	10121.1	10109.0	9930.8
47.5°	11854.7	11937.7	11996.6	12129.8	12389.3	12219.8	11529.4	11320.1	11190.3	11095.2	10813.2
50°	11939.5	12027.7	12228.4	12616.0	13230.1	13302.8	12681.7	12446.4	12287.2	12114.2	11699.0
52.5°	11825.3	11982.7	12252.6	12904.9	13795.9	14171.3	13787.2	13581.4	13399.7	13117.7	12501.8
55°	11152.3	11309.7	11861.6	12901.4	14077.9	14780.3	14832.2	14740.5	14536.4	14091.7	13150.6
57.5°	9733.6	9967.2	10840.9	12462.0	14072.7	15304.5	15856.4	15922.2	15693.8	15057.1	13660.9
60°	7768.2	8084.8	9150.5	11487.9	13638.4	15588.3	16754.4	17083.1	16840.9	16008.7	14074.4
62.5°	5420.4	5787.2	6795.9	9962.0	12645.4	15384.1	17410.1	18017.4	17834.0	16859.9	14233.6
65°	3306.2	3423.9	4237.0	7839.1	10956.8	14529.5	17612.5	18522.5	18462.0	17380.7	13998.3
67.5°	2202.4	2301.0	2534.6	5375.4	8505.2	12821.8	17128.1	18434.3	18451.6	17295.9	13136.7
70°	1327.0	1411.8	1564.0	3126.3	5512.1	10148.8	15628.1	17309.7	17410.1	16162.7	11503.5
72.5°	546.7	603.8	742.2	1417.0	2854.7	6441.2	12444.7	14861.6	15095.2	13590.0	8828.7
75°	309.7	339.1	436.0	711.1	1238.8	3001.7	7538.1	10550.2	10894.5	9366.8	5311.4
77.5°	205.9	219.7	282.0	460.2	697.2	1024.2	3221.5	5496.6	6154.0	5115.9	2299.3
80°	138.4	150.5	193.8	308.0	453.3	439.4	1026.0	2036.3	2505.2	1757.8	560.6
82.5°	93.4	95.2	138.4	202.4	287.2	212.8	302.8	633.2	795.8	508.7	212.8
85°	53.6	51.9	102.1	117.6	128.0	88.2	91.7	190.3	249.1	214.5	121.1
87.5°	6.9	10.4	39.8	31.1	17.3	19.0	19.0	32.9	48.4	51.9	26.0
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°	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7	3001.7
2.5°	3005.2	3003.5	2998.3	2993.1	2981.0	2974.1	2977.5	2974.1	2972.3	2974.1	2981.0
5°	3027.7	3022.5	3008.7	2991.4	2967.1	2937.7	2918.7	2891.0	2865.1	2849.5	2852.9
7.5°	3088.2	3083.1	3064.0	3015.6	2937.7	2814.9	2702.4	2603.8	2529.4	2486.2	2487.9
10°	3185.1	3176.5	3147.1	3039.8	2835.6	2567.5	2344.3	2159.2	2038.1	1981.0	1975.8
12.5°	3299.3	3288.9	3237.0	3017.3	2641.9	2223.2	1915.2	1709.3	1596.9	1546.7	1541.5
15°	3434.3	3420.4	3318.3	2910.0	2359.9	1842.6	1560.6	1406.6	1333.9	1288.9	1290.7
17.5°	3602.1	3577.9	3378.9	2749.1	2053.6	1551.9	1342.6	1226.6	1162.6	1119.4	1115.9
20°	3820.1	3780.3	3427.3	2557.1	1771.6	1368.5	1195.5	1098.6	1050.2	1012.1	1005.2
22.5°	4124.6	4067.5	3486.2	2349.5	1572.7	1242.2	1086.5	1015.6	975.8	932.5	925.6
25°	4501.7	4434.3	3558.8	2157.4	1436.0	1133.2	1006.9	948.1	901.4	851.2	846.0
27.5°	5029.4	4908.3	3645.3	2000.0	1318.3	1039.8	934.3	868.5	814.9	773.4	764.7
30°	5617.7	5418.7	3721.5	1904.8	1211.1	953.3	839.1	773.4	723.2	693.8	688.6
32.5°	6174.8	5904.9	3771.6	1863.3	1114.2	854.7	735.3	664.4	626.3	617.6	622.8
35°	6700.7	6344.3	3766.4	1823.5	1027.7	756.1	633.2	560.6	531.1	536.3	536.3
37.5°	7306.2	6813.2	3730.1	1761.3	956.8	666.1	545.0	481.0	455.0	456.7	463.7
40°	8010.4	7354.7	3707.6	1643.6	878.9	583.0	472.3	420.4	401.4	394.5	392.7
42.5°	8761.3	7878.9	3711.1	1510.4	782.0	508.7	422.1	378.9	361.6	356.4	354.7
45°	9515.6	8378.9	3716.3	1372.0	679.9	451.6	385.8	349.5	339.1	332.2	332.2
47.5°	10224.9	8804.5	3619.4	1223.2	579.6	408.3	356.4	332.2	323.5	314.9	314.9
50°	10885.8	9088.3	3385.8	1050.2	500.0	373.7	333.9	316.6	308.0	299.3	299.3
52.5°	11399.7	9133.2	3000.0	872.0	444.6	347.8	320.1	304.5	294.1	285.5	283.7
55°	11628.1	8851.2	2451.6	705.9	401.4	325.3	306.2	290.7	278.5	269.9	268.2
57.5°	11569.2	8257.8	1911.8	567.5	359.9	302.8	288.9	278.5	264.7	250.9	249.1
60°	11280.3	7463.7	1441.2	472.3	321.8	278.5	269.9	261.2	242.2	221.5	218.0
62.5°	10780.3	6465.4	1027.7	391.0	280.3	250.9	247.4	240.5	212.8	174.7	171.3
65°	10015.6	5252.6	692.0	325.3	240.5	219.7	221.5	209.3	173.0	129.8	126.3
67.5°	8897.9	3840.8	442.9	266.4	200.7	183.4	185.1	178.2	147.1	110.7	105.5
70°	7474.1	2543.3	288.9	202.4	160.9	141.9	152.2	154.0	124.6	90.0	86.5
72.5°	5479.3	1501.7	202.4	150.5	117.6	98.6	124.6	128.0	100.3	67.5	64.0
75°	3122.8	712.8	152.2	109.0	72.7	69.2	96.9	96.9	69.2	45.0	41.5
77.5°	1311.4	297.6	107.3	70.9	41.5	39.8	65.7	60.6	34.6	20.8	20.8
80°	378.9	133.2	57.1	34.6	17.3	15.6	26.0	19.0	8.7	3.5	3.5
82.5°	148.8	58.8	22.5	13.8	6.9	6.9	3.5	0.0	0.0	0.0	0.0
85°	88.2	24.2	10.4	5.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	22.5	5.2	3.5	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	0.0

(END OF REPORT)