

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: P882040

Luminaire Tested: **NAV-SB1D-722-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882040  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1D-722-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

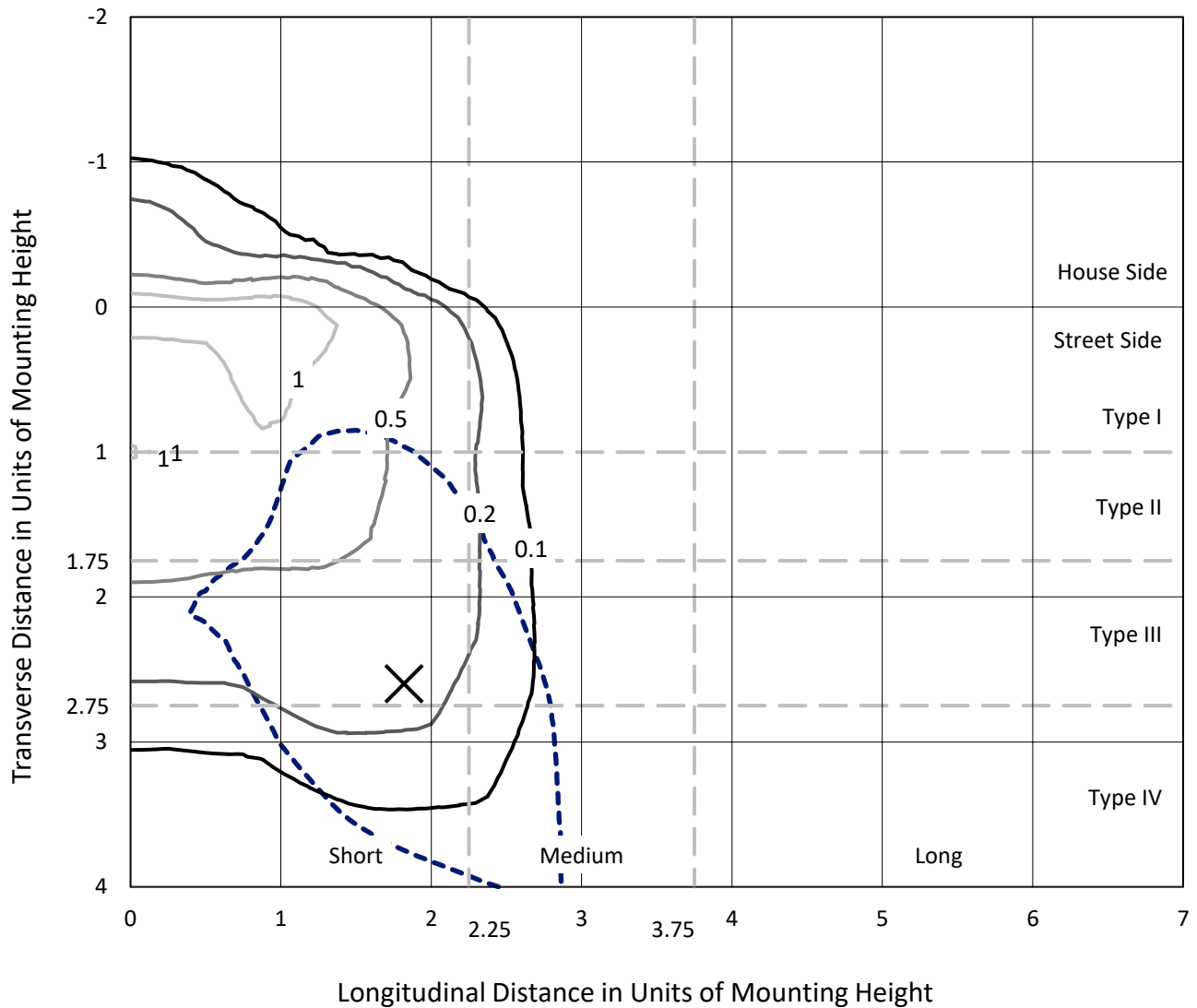
Lumens per Lamp: N/A  
Luminaire Lumens: 6145 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): 120.0  
Input Current (Ain): 0.638  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.673  
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

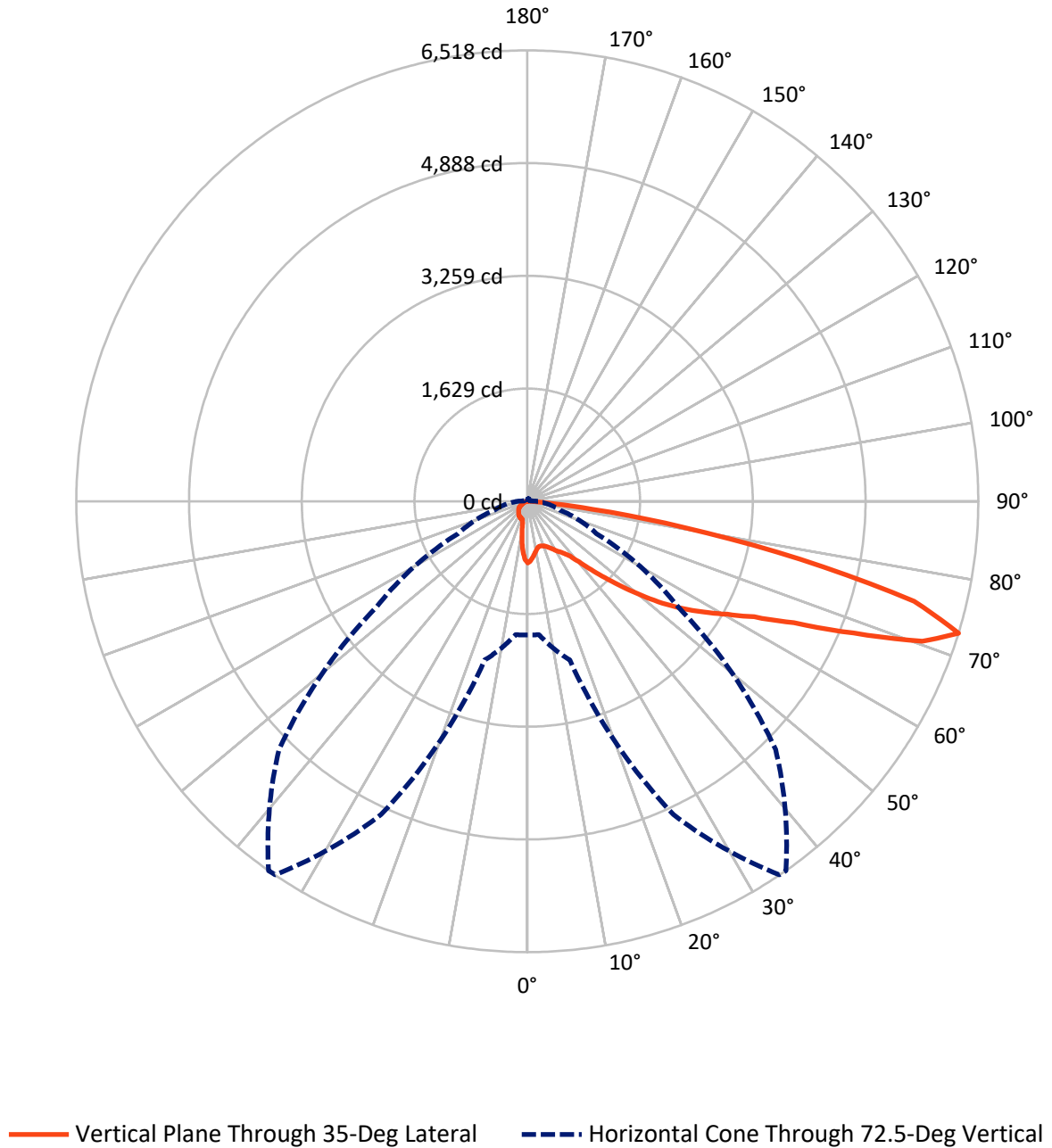
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	691.6	0.0	691.6
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	5453.4	0.0	5453.4
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	6145.0	0.0	6145.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	1.2
10°-20°	171.2	2.8
20°-30°	278.1	4.5
30°-40°	464.0	7.6
40°-50°	878.0	14.3
50°-60°	1395.1	22.7
60°-70°	1725.9	28.1
70°-80°	1072.8	17.5
80°-90°	86.7	1.4
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°	6145.0	100.0
0°-180°	6145.0	100.0

**Coefficient of Utilization**



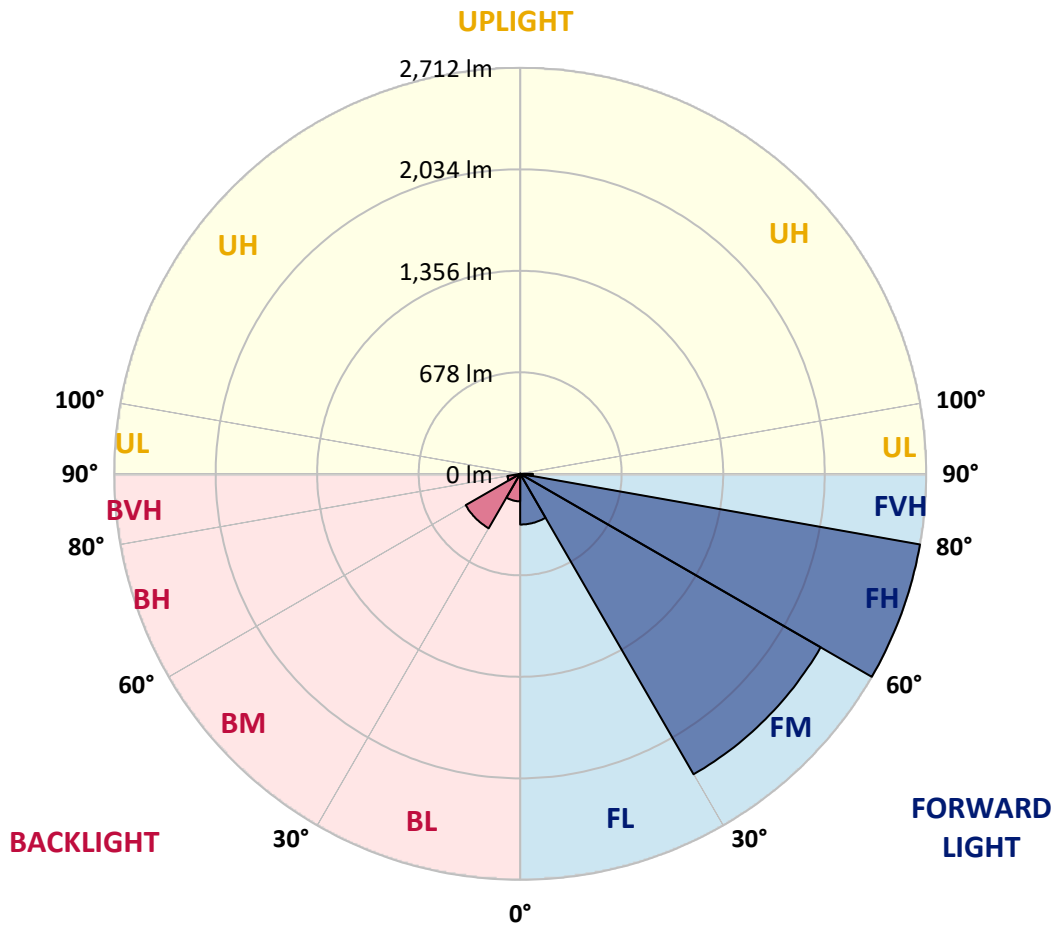
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	338.7	5.5			
FM (30°-60°)	2317.3	37.7			
FH (60°-80°)	2711.9	44.1			G2/5000
FVH (80°-90°)	85.5	1.4			G1/100
BL (0°-30°)	183.8	3.0	B1/500		
BM (30°-60°)	419.9	6.8	B1/1000		
BH (60°-80°)	86.8	1.4	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-G2**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6
2.5°	851.0	858.2	859.5	861.8	861.8	864.5	869.0	875.3	885.7	891.1	894.7
5°	784.4	789.8	796.5	801.9	812.3	813.6	831.2	848.3	872.2	890.2	902.8
7.5°	717.3	723.6	732.6	745.6	759.1	763.2	789.8	818.6	856.4	890.2	911.3
10°	670.0	670.4	678.5	691.6	713.2	718.2	750.6	791.6	838.8	884.8	919.4
12.5°	643.4	646.6	650.2	660.1	680.8	683.9	718.6	766.8	821.3	881.6	928.9
15°	643.4	645.7	647.9	652.9	669.5	672.2	702.9	751.0	812.3	883.0	944.2
17.5°	650.2	653.8	652.0	657.8	675.4	677.2	704.2	746.5	811.8	891.5	967.6
20°	666.4	669.1	665.5	669.1	686.6	690.3	718.2	755.1	819.5	906.4	996.9
22.5°	692.1	693.4	684.8	687.5	705.6	710.1	742.5	779.4	837.9	930.2	1036.1
25°	724.5	727.2	714.1	717.3	734.4	739.8	777.2	815.9	867.2	963.1	1086.0
27.5°	761.8	763.2	751.9	751.5	773.5	781.2	819.0	860.9	906.4	1004.5	1149.1
30°	804.6	808.7	797.9	796.1	824.0	830.3	867.7	916.3	964.0	1066.7	1238.7
32.5°	838.4	841.5	835.2	839.7	868.1	873.1	926.6	994.6	1054.5	1154.9	1360.7
35°	887.0	888.8	874.4	882.5	914.9	927.5	1007.2	1104.5	1168.4	1265.7	1520.1
37.5°	1063.1	1063.1	1001.8	961.8	992.8	1004.1	1117.5	1242.7	1308.9	1414.3	1720.9
40°	1306.7	1302.6	1213.0	1131.1	1127.0	1149.1	1274.7	1417.0	1490.4	1592.6	1946.9
42.5°	1566.5	1560.2	1438.1	1357.1	1343.6	1351.2	1456.1	1631.7	1706.5	1810.0	2190.1
45°	1797.0	1795.2	1683.5	1574.6	1550.2	1574.6	1682.6	1883.0	1936.6	2045.5	2432.8
47.5°	1990.2	1990.2	1908.7	1837.5	1824.9	1839.3	1989.3	2161.7	2156.8	2296.3	2669.1
50°	2212.6	2210.8	2133.3	2102.7	2115.8	2136.0	2342.3	2455.3	2384.6	2542.6	2880.3
52.5°	2368.4	2379.2	2352.6	2347.7	2414.3	2449.4	2700.7	2742.5	2588.6	2776.3	3038.4
55°	2491.7	2504.4	2535.0	2569.6	2698.0	2743.9	3047.8	3014.9	2759.2	2978.9	3129.3
57.5°	2666.4	2648.4	2695.7	2764.2	2971.7	3027.1	3384.2	3272.0	2896.5	3143.3	3139.2
60°	2878.5	2881.2	2889.3	2975.8	3245.0	3316.2	3715.6	3515.2	2984.8	3244.1	3029.4
62.5°	3133.4	3137.4	3154.1	3286.9	3612.0	3679.1	4068.6	3714.2	3025.3	3215.8	2745.7
65°	3115.8	3132.9	3318.9	3773.2	4169.9	4236.1	4480.5	3853.8	2964.1	2956.4	2235.5
67.5°	2838.4	2866.4	3177.5	4354.0	5011.0	5084.8	4978.5	3881.3	2699.8	2299.0	1458.4
70°	2474.6	2484.5	2858.7	4876.3	5984.9	6059.6	5424.3	3579.1	2048.7	1282.3	653.3
72.5°	1932.5	1934.8	2373.8	4997.4	6513.5	6517.5	5074.4	2657.0	1101.8	492.6	226.9
75°	1380.5	1367.0	1589.9	4052.8	5730.5	5776.4	3804.3	1246.3	421.0	232.8	113.0
77.5°	740.2	755.1	899.6	2403.5	3958.7	4037.0	2075.7	359.3	214.3	158.5	74.7
80°	228.7	241.3	368.8	1100.4	2242.3	2289.6	769.5	159.8	149.5	113.0	49.1
82.5°	72.0	74.7	172.0	462.4	930.7	952.3	222.9	90.5	102.2	74.7	28.8
85°	20.7	21.2	76.5	172.5	230.1	234.6	62.6	35.1	58.5	46.4	14.9
87.5°	2.3	7.2	28.8	28.8	20.3	19.8	6.8	7.7	16.7	5.9	2.7
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°	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6
2.5°	892.4	892.9	887.0	877.1	866.3	857.3	846.0	837.0	830.7	828.9	832.1
5°	898.7	895.6	878.9	848.7	812.7	781.7	747.0	719.5	701.5	693.9	696.6
7.5°	908.2	899.2	862.7	803.3	734.4	673.1	611.0	562.8	532.2	516.9	519.2
10°	916.3	898.3	835.7	737.5	632.2	539.4	455.7	397.6	365.2	349.9	350.3
12.5°	923.9	897.8	800.6	659.6	516.9	403.4	325.5	296.7	287.7	284.6	283.7
15°	938.3	899.2	756.4	570.5	402.1	304.8	276.5	276.0	277.8	276.9	276.5
17.5°	958.2	900.5	706.5	475.9	310.2	268.8	267.5	271.5	274.2	272.9	272.4
20°	983.8	905.9	653.3	382.3	266.6	259.8	263.0	266.6	268.8	266.6	266.1
22.5°	1019.8	915.4	595.2	307.1	252.6	254.4	257.1	261.2	263.4	260.3	259.8
25°	1064.0	930.2	538.1	267.0	245.8	248.1	252.1	256.6	259.4	256.2	255.7
27.5°	1121.2	954.1	485.4	258.0	239.1	240.4	246.3	253.0	256.6	252.6	252.6
30°	1204.0	993.3	439.9	262.1	235.0	231.9	240.0	249.4	253.5	249.9	249.4
32.5°	1313.9	1048.7	412.0	268.4	233.2	222.0	229.6	241.8	248.5	246.3	246.3
35°	1457.9	1132.9	401.2	275.6	231.9	211.6	217.0	230.1	241.8	244.0	244.0
37.5°	1632.6	1249.9	404.3	278.7	227.8	203.1	205.8	217.0	232.3	239.5	241.3
40°	1831.2	1386.4	422.3	275.6	223.3	195.9	196.3	204.9	218.4	229.2	232.8
42.5°	2036.1	1545.7	455.7	263.9	219.3	189.6	188.2	194.1	203.1	210.7	213.9
45°	2231.0	1709.6	488.5	247.6	214.3	183.3	180.1	182.4	184.2	187.3	189.1
47.5°	2401.2	1824.9	479.1	232.8	207.6	176.1	170.6	169.7	164.3	163.9	163.4
50°	2518.8	1850.1	425.5	217.9	197.7	167.9	159.4	154.0	144.5	140.0	140.5
52.5°	2556.1	1750.6	347.6	203.1	181.5	157.1	145.0	136.4	124.7	120.7	120.2
55°	2506.6	1555.7	277.8	185.1	158.9	142.7	129.2	118.0	108.5	103.6	103.6
57.5°	2385.5	1307.6	219.7	163.9	135.1	126.5	113.0	101.8	93.7	88.7	87.8
60°	2184.7	1038.3	173.8	138.7	115.3	109.0	95.0	87.8	80.6	74.7	73.4
62.5°	1879.8	741.1	136.4	109.9	96.4	89.2	81.0	75.6	67.1	59.0	57.6
65°	1467.0	453.4	105.4	80.6	77.4	73.8	68.9	63.9	53.6	45.5	44.1
67.5°	925.3	214.8	75.2	60.8	61.2	59.4	57.2	53.1	45.5	38.3	37.4
70°	407.5	104.0	49.5	46.4	45.5	45.5	47.3	45.9	38.7	32.0	30.6
72.5°	138.7	55.8	36.9	35.1	32.9	32.4	39.6	38.3	31.1	24.8	23.4
75°	72.5	37.4	27.0	25.2	19.8	23.9	31.5	29.7	22.1	16.2	14.9
77.5°	47.3	26.6	18.5	16.2	11.3	15.8	23.4	20.7	13.1	8.1	7.2
80°	29.7	17.6	10.8	7.7	5.4	8.6	12.6	9.0	5.0	1.8	1.4
82.5°	15.8	9.0	4.1	2.7	2.3	2.7	3.2	2.3	0.9	0.0	0.0
85°	6.3	3.2	1.4	0.9	0.5	0.0	0.9	0.5	0.0	0.0	0.0
87.5°	2.3	0.5	0.0	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)