

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: P881910

Luminaire Tested: **NAV-SB1C-740-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881910  
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-SB1C-740-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

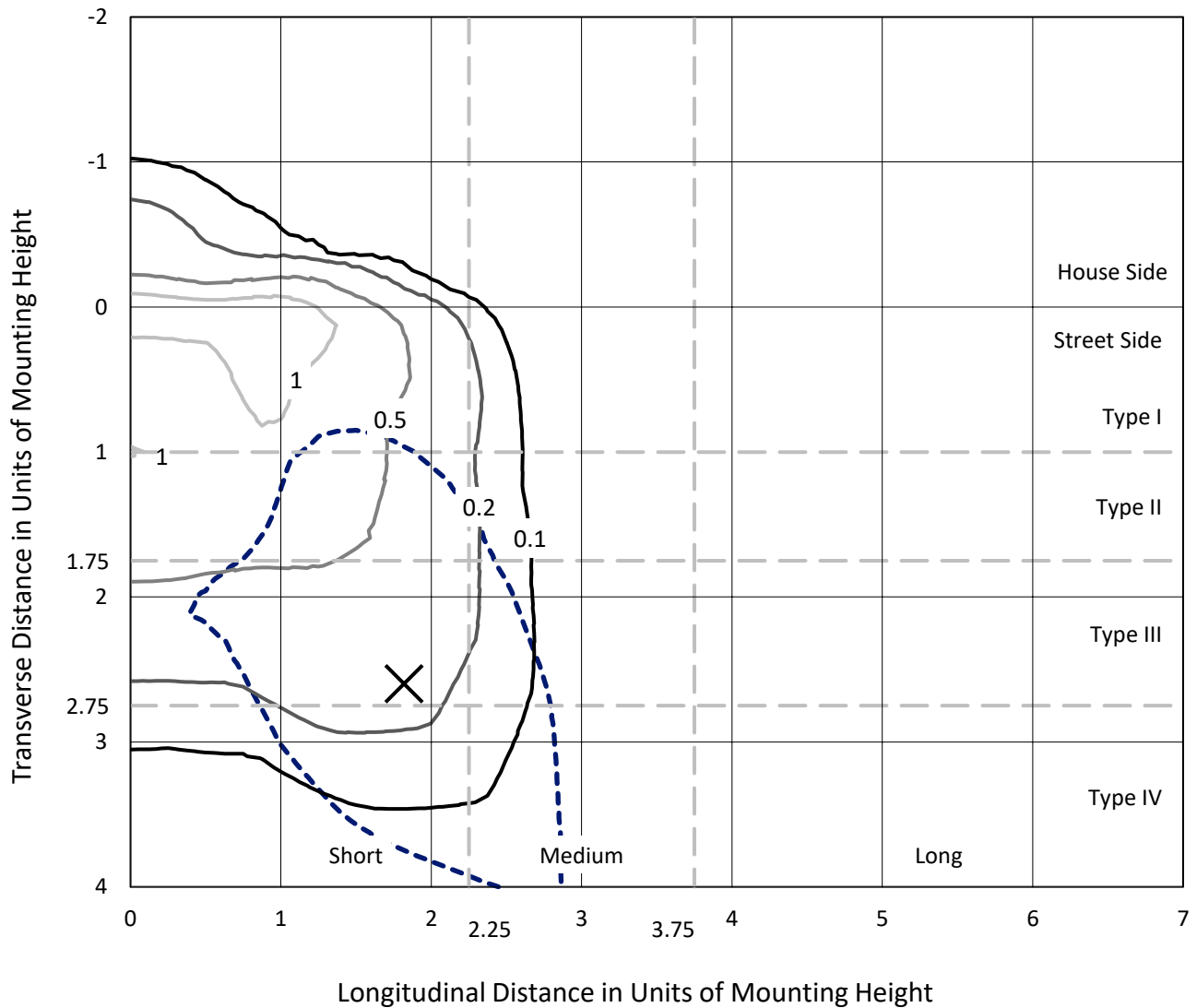
Lumens per Lamp: N/A  
Luminaire Lumens: 6118 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
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

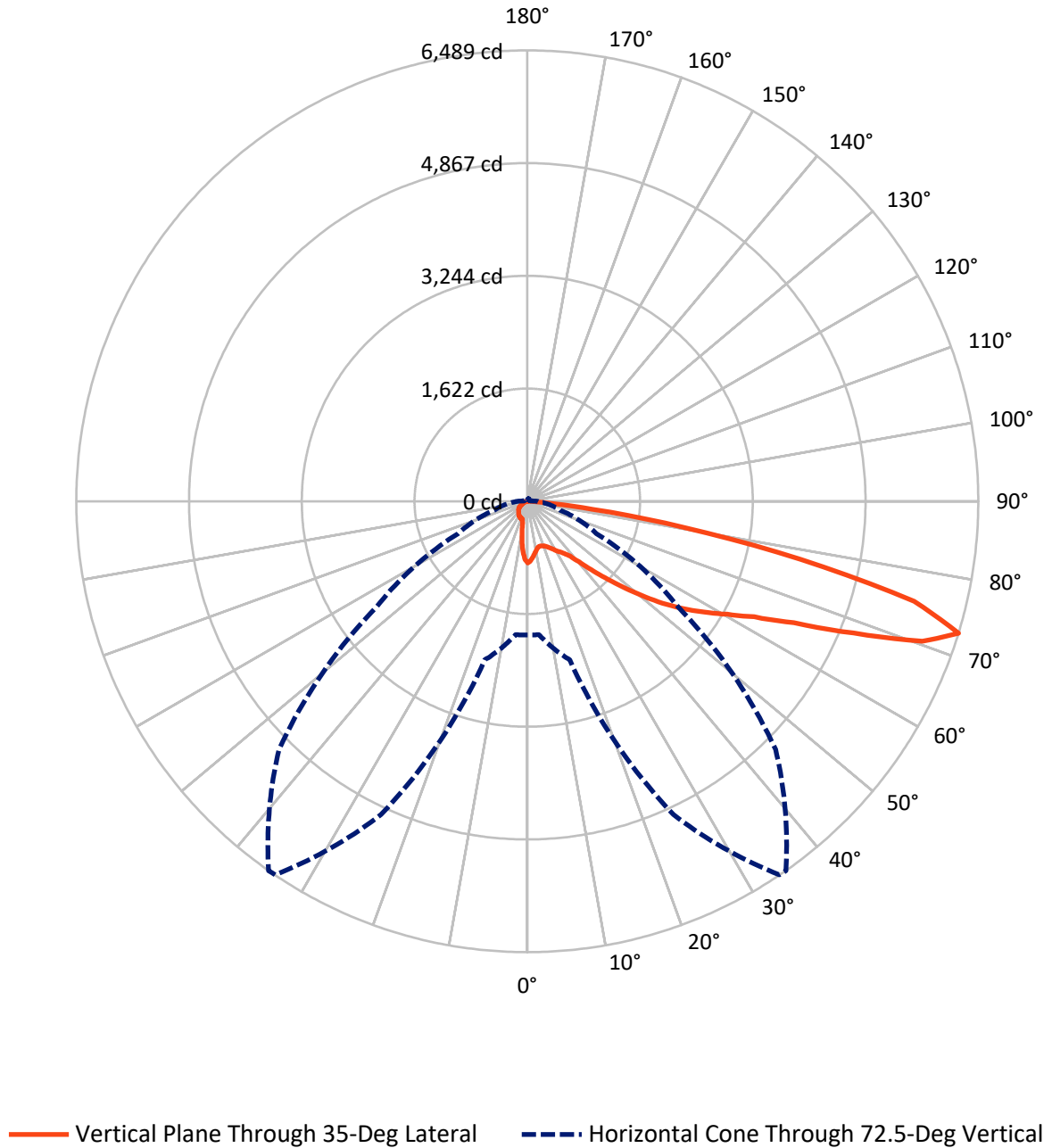
✕ Max cd  
 - - - 1/2 Max cd



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	688.6	0.0	688.6
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	5429.4	0.0	5429.4
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	6118.0	0.0	6118.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	1.2
10°-20°	170.5	2.8
20°-30°	276.9	4.5
30°-40°	462.0	7.6
40°-50°	874.1	14.3
50°-60°	1389.0	22.7
60°-70°	1718.3	28.1
70°-80°	1068.1	17.5
80°-90°	86.3	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°	6118.0	100.0
0°-180°	6118.0	100.0

**Coefficient of Utilization**



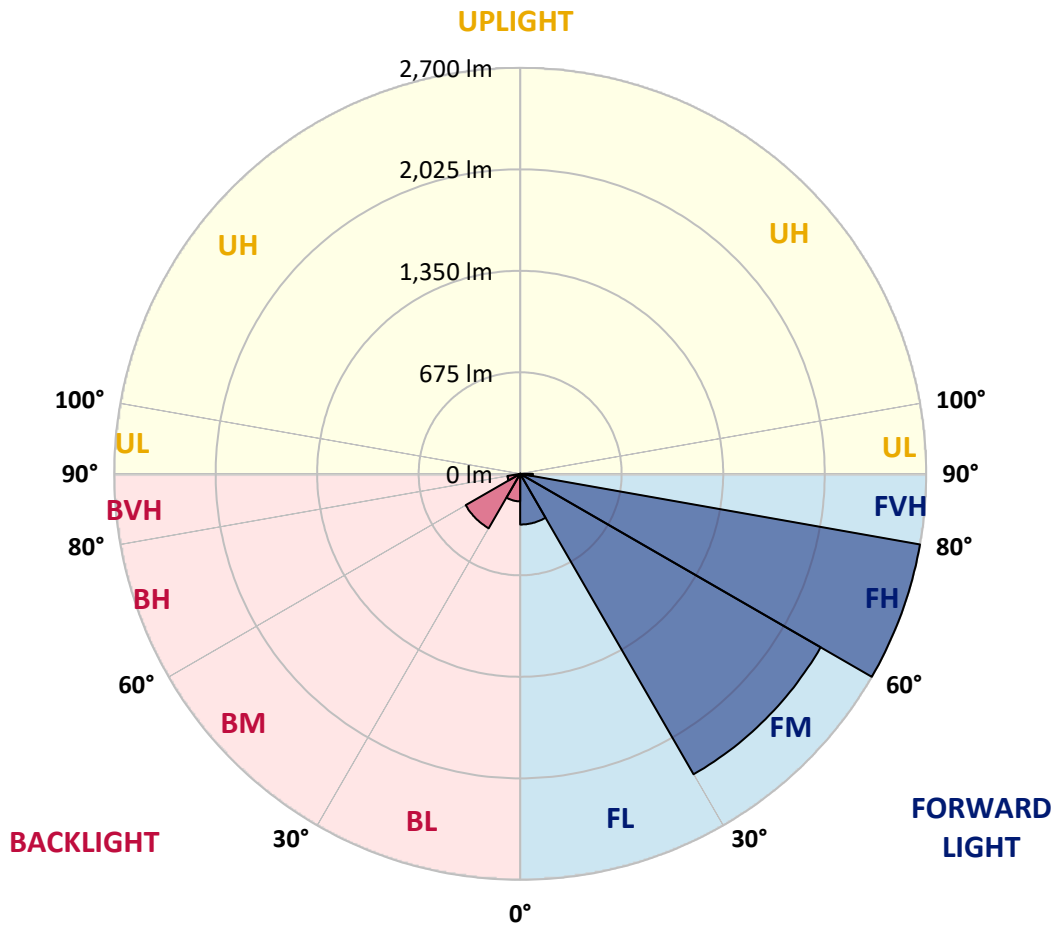
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	337.3	5.5			
FM (30°-60°)	2307.1	37.7			
FH (60°-80°)	2699.9	44.1			G2/5000
FVH (80°-90°)	85.1	1.4			G1/100
BL (0°-30°)	183.0	3.0	B1/500		
BM (30°-60°)	418.0	6.8	B1/1000		
BH (60°-80°)	86.4	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°	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7
2.5°	847.3	854.4	855.8	858.0	858.0	860.7	865.2	871.5	881.8	887.2	890.7
5°	780.9	786.3	793.0	798.4	808.7	810.0	827.5	844.6	868.3	886.3	898.8
7.5°	714.1	720.4	729.4	742.4	755.8	759.8	786.3	815.0	852.6	886.3	907.3
10°	667.0	667.5	675.6	688.6	710.1	715.0	747.3	788.1	835.2	880.9	915.4
12.5°	640.6	643.7	647.3	657.2	677.8	680.9	715.5	763.4	817.7	877.7	924.8
15°	640.6	642.8	645.1	650.0	666.6	669.3	699.8	747.7	808.7	879.1	940.0
17.5°	647.3	650.9	649.1	654.9	672.4	674.2	701.1	743.3	808.3	887.6	963.4
20°	663.5	666.1	662.6	666.1	683.6	687.2	715.0	751.8	815.9	902.4	992.5
22.5°	689.0	690.4	681.8	684.5	702.5	706.9	739.2	776.0	834.3	926.2	1031.5
25°	721.3	724.0	711.0	714.1	731.1	736.5	773.7	812.3	863.4	958.9	1081.3
27.5°	758.5	759.8	748.6	748.2	770.1	777.8	815.4	857.1	902.4	1000.1	1144.0
30°	801.1	805.1	794.4	792.6	820.4	826.6	863.8	912.3	959.8	1062.0	1233.2
32.5°	834.7	837.8	831.6	836.0	864.3	869.2	922.6	990.3	1049.9	1149.8	1354.7
35°	883.1	884.9	870.6	878.6	910.9	923.5	1002.8	1099.6	1163.3	1260.1	1513.4
37.5°	1058.4	1058.4	997.4	957.5	988.5	999.7	1112.6	1237.3	1303.2	1408.1	1713.3
40°	1300.9	1296.9	1207.7	1126.1	1122.1	1144.0	1269.1	1410.7	1483.8	1585.6	1938.4
42.5°	1559.6	1553.3	1431.8	1351.1	1337.7	1345.3	1449.7	1624.6	1699.0	1802.1	2180.4
45°	1789.1	1787.3	1676.1	1567.6	1543.4	1567.6	1675.2	1874.7	1928.1	2036.5	2422.1
47.5°	1981.4	1981.4	1900.3	1829.4	1816.9	1831.2	1980.5	2152.2	2147.3	2286.2	2657.4
50°	2202.9	2201.1	2124.0	2093.5	2106.5	2126.7	2332.0	2444.5	2374.1	2531.5	2867.7
52.5°	2358.0	2368.7	2342.3	2337.3	2403.7	2438.7	2688.8	2730.5	2577.2	2764.1	3025.0
55°	2480.8	2493.3	2523.8	2558.3	2686.1	2731.8	3034.4	3001.7	2747.1	2965.8	3115.6
57.5°	2654.7	2636.8	2683.9	2752.0	2958.7	3013.8	3369.3	3257.7	2883.8	3129.5	3125.4
60°	2865.9	2868.6	2876.6	2962.7	3230.8	3301.6	3699.2	3499.7	2971.7	3229.9	3016.0
62.5°	3119.6	3123.6	3140.2	3272.5	3596.1	3662.9	4050.7	3697.9	3012.0	3201.6	2733.6
65°	3102.1	3119.2	3304.3	3756.6	4151.5	4217.4	4460.9	3836.9	2951.0	2943.4	2225.7
67.5°	2826.0	2853.8	3163.5	4334.9	4988.9	5062.5	4956.7	3864.2	2687.9	2288.9	1452.0
70°	2463.8	2473.6	2846.1	4854.9	5958.6	6033.0	5400.5	3563.4	2039.7	1276.7	650.5
72.5°	1924.0	1926.3	2363.3	4975.5	6484.9	6488.9	5052.1	2645.3	1096.9	490.4	225.9
75°	1374.4	1361.0	1582.9	4035.0	5705.3	5751.0	3787.5	1240.8	419.1	231.8	112.5
77.5°	737.0	751.8	895.7	2392.9	3941.3	4019.3	2066.6	357.7	213.4	157.8	74.4
80°	227.7	240.3	367.1	1095.6	2232.4	2279.5	766.1	159.1	148.8	112.5	48.9
82.5°	71.7	74.4	171.2	460.4	926.6	948.1	221.9	90.1	101.8	74.4	28.7
85°	20.6	21.1	76.2	171.7	229.1	233.6	62.3	35.0	58.3	46.2	14.8
87.5°	2.2	7.2	28.7	28.7	20.2	19.7	6.7	7.6	16.6	5.8	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°	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7	886.7
2.5°	888.5	888.9	883.1	873.3	862.5	853.5	842.3	833.4	827.1	825.3	828.4
5°	894.8	891.6	875.0	845.0	809.2	778.2	743.7	716.4	698.4	690.8	693.5
7.5°	904.2	895.2	858.9	799.7	731.1	670.2	608.3	560.4	529.9	514.6	516.9
10°	912.3	894.3	832.0	734.3	629.4	537.0	453.7	395.8	363.6	348.3	348.8
12.5°	919.9	893.9	797.0	656.7	514.6	401.7	324.1	295.4	286.5	283.3	282.4
15°	934.2	895.2	753.1	568.0	400.3	303.5	275.2	274.8	276.6	275.7	275.2
17.5°	953.9	896.6	703.4	473.8	308.9	267.6	266.3	270.3	273.0	271.7	271.2
20°	979.5	901.9	650.5	380.6	265.4	258.7	261.8	265.4	267.6	265.4	264.9
22.5°	1015.4	911.4	592.6	305.7	251.5	253.3	256.0	260.0	262.2	259.1	258.7
25°	1059.3	926.2	535.7	265.8	244.8	247.0	251.0	255.5	258.2	255.1	254.6
27.5°	1116.2	949.9	483.2	256.9	238.0	239.4	245.2	251.9	255.5	251.5	251.5
30°	1198.7	988.9	438.0	260.9	234.0	230.9	238.9	248.3	252.4	248.8	248.3
32.5°	1308.1	1044.1	410.2	267.2	232.2	221.0	228.6	240.7	247.5	245.2	245.2
35°	1451.5	1127.9	399.4	274.3	230.9	210.7	216.1	229.1	240.7	243.0	243.0
37.5°	1625.5	1244.4	402.6	277.5	226.8	202.2	204.9	216.1	231.3	238.5	240.3
40°	1823.2	1380.3	420.5	274.3	222.3	195.0	195.5	204.0	217.4	228.2	231.8
42.5°	2027.1	1539.0	453.7	262.7	218.3	188.7	187.4	193.2	202.2	209.8	212.9
45°	2221.2	1702.1	486.4	246.6	213.4	182.5	179.3	181.6	183.3	186.5	188.3
47.5°	2390.7	1816.9	477.0	231.8	206.7	175.3	169.9	169.0	163.6	163.2	162.7
50°	2507.7	1842.0	423.6	217.0	196.8	167.2	158.7	153.3	143.9	139.4	139.9
52.5°	2544.9	1742.9	346.1	202.2	180.7	156.5	144.3	135.8	124.2	120.1	119.7
55°	2495.6	1548.8	276.6	184.2	158.2	142.1	128.7	117.5	108.0	103.1	103.1
57.5°	2375.0	1301.8	218.8	163.2	134.5	126.0	112.5	101.3	93.2	88.3	87.4
60°	2175.1	1033.7	173.0	138.1	114.8	108.5	94.6	87.4	80.2	74.4	73.1
62.5°	1871.6	737.9	135.8	109.4	95.9	88.8	80.7	75.3	66.8	58.7	57.4
65°	1460.5	451.4	104.9	80.2	77.1	73.5	68.6	63.7	53.3	45.3	43.9
67.5°	921.2	213.8	74.9	60.5	61.0	59.2	56.9	52.9	45.3	38.1	37.2
70°	405.7	103.6	49.3	46.2	45.3	45.3	47.1	45.7	38.6	31.8	30.5
72.5°	138.1	55.6	36.8	35.0	32.7	32.3	39.4	38.1	30.9	24.7	23.3
75°	72.2	37.2	26.9	25.1	19.7	23.8	31.4	29.6	22.0	16.1	14.8
77.5°	47.1	26.4	18.4	16.1	11.2	15.7	23.3	20.6	13.0	8.1	7.2
80°	29.6	17.5	10.8	7.6	5.4	8.5	12.6	9.0	4.9	1.8	1.3
82.5°	15.7	9.0	4.0	2.7	2.2	2.7	3.1	2.2	0.9	0.0	0.0
85°	6.3	3.1	1.3	0.9	0.4	0.0	0.9	0.4	0.0	0.0	0.0
87.5°	2.2	0.4	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)