

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: P961949

Luminaire Tested: **NAV-SB2B-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961949
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-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

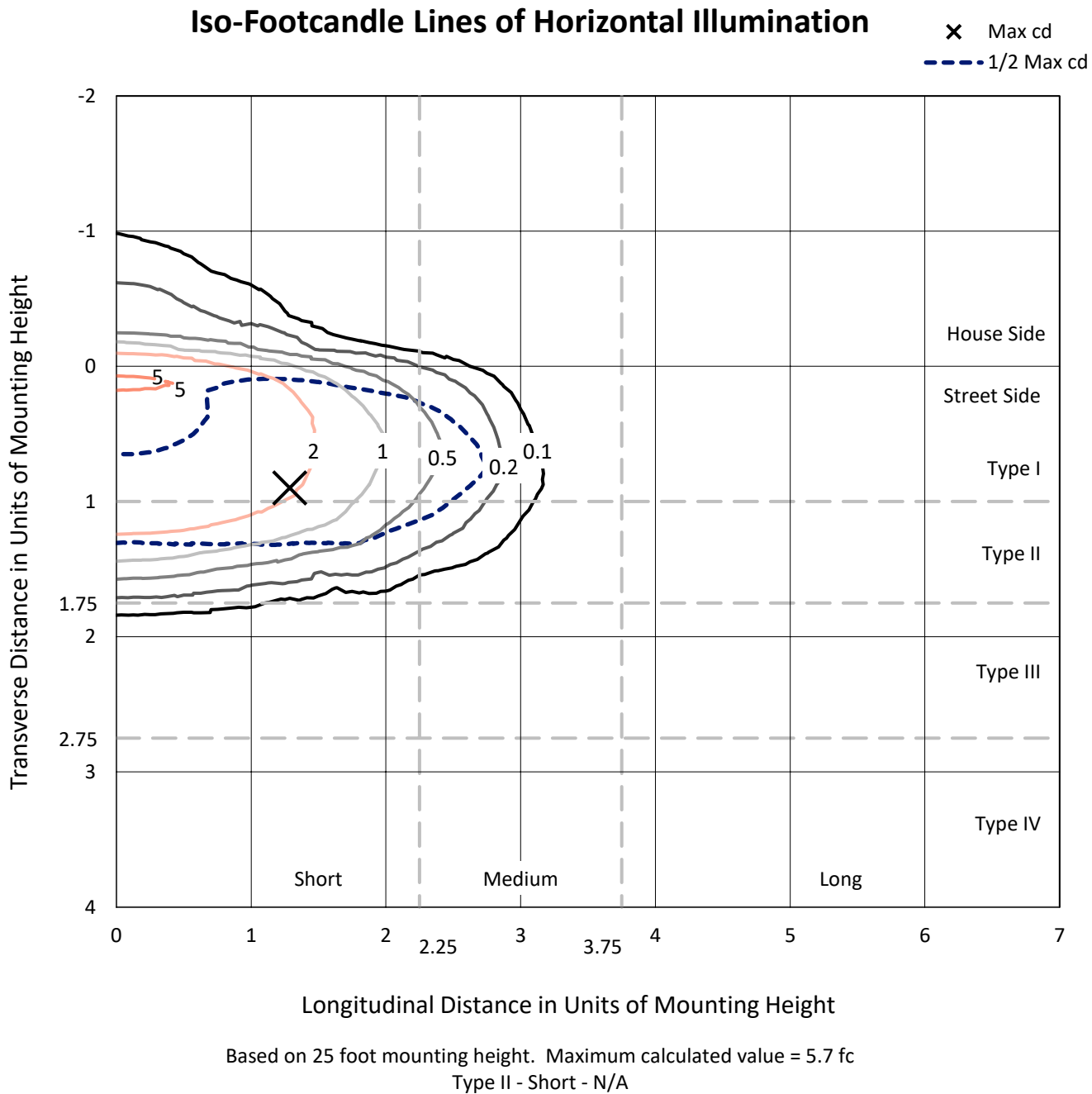
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10411.9 lumens
Efficiency: N/A
Efficacy: 140.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

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

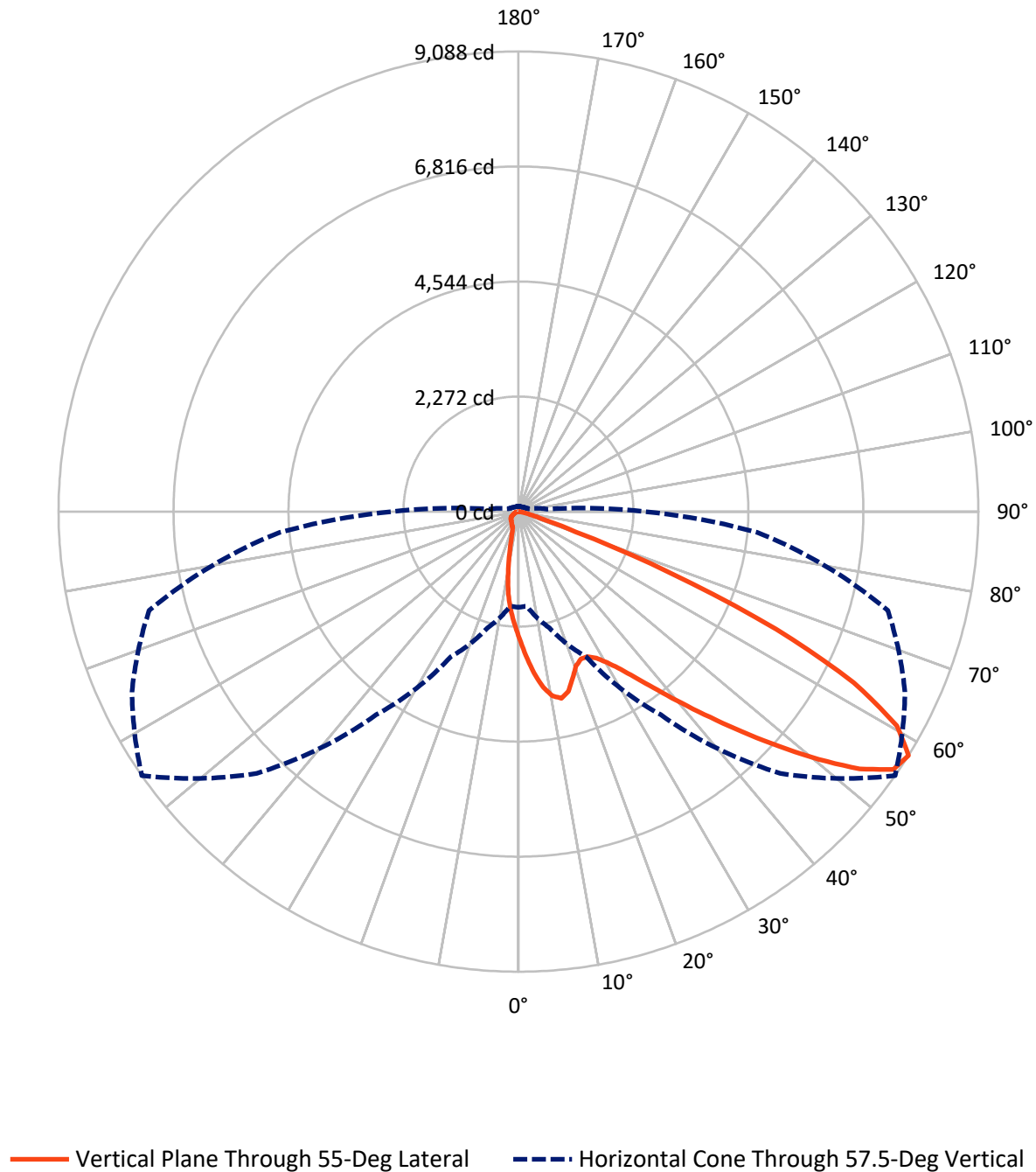


REPORT NUMBER: P961949
CATALOG NUMBER: NAV-SB2B-740-U-AFL-HSS



REPORT NUMBER: P961949
CATALOG NUMBER: NAV-SB2B-740-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961949

CATALOG NUMBER: NAV-SB2B-740-U-AFL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	813.1	0.0	813.1
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	9598.8	0.0	9598.8
	% Fixture	92.2	0.0	92.2
Total	Lumens	10411.9	0.0	10411.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.5	2.2
10°-20°	563.9	5.4
20°-30°	902.2	8.7
30°-40°	1527.1	14.7
40°-50°	2507.2	24.1
50°-60°	2755.5	26.5
60°-70°	1580.6	15.2
70°-80°	322.9	3.1
80°-90°	19.0	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°	10411.9	100.0
0°-180°	10411.9	100.0

Coefficient of Utilization



REPORT NUMBER: P961949

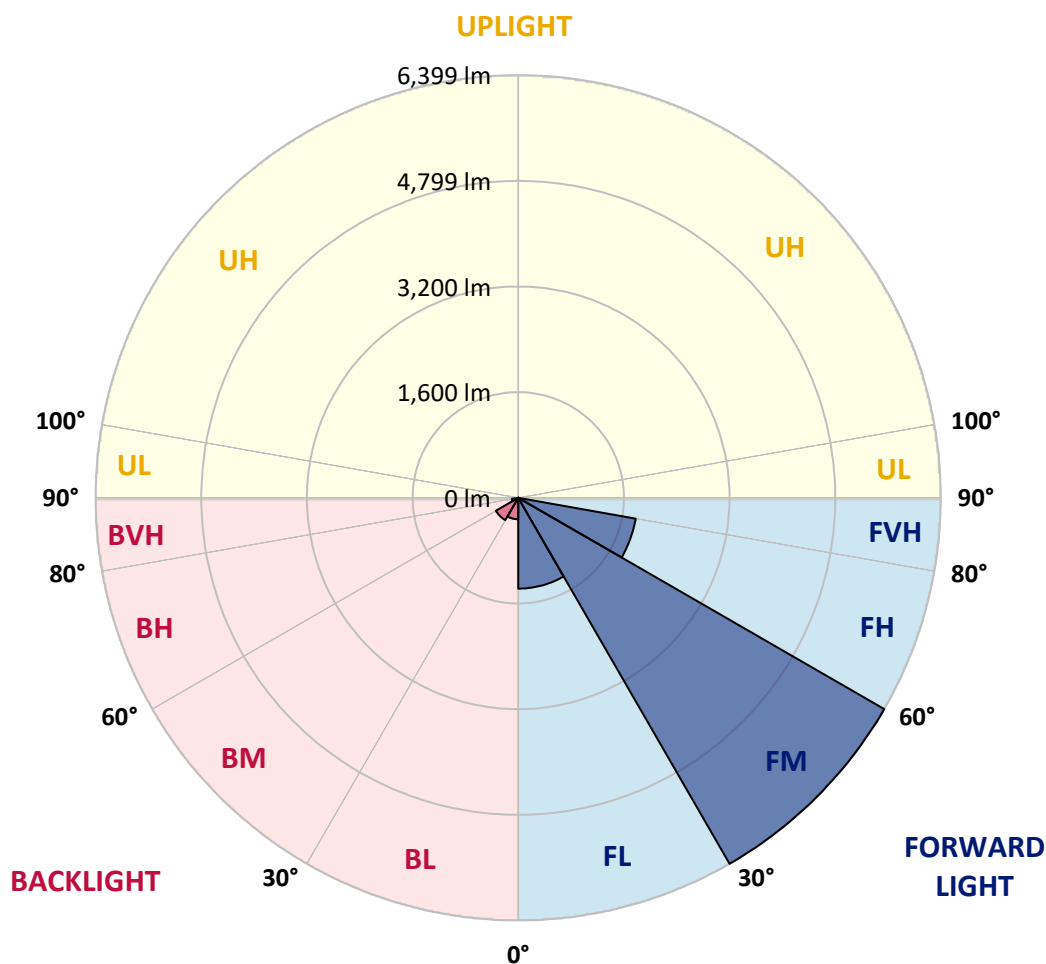
CATALOG NUMBER: NAV-SB2B-740-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1375.0	13.2			
FM	(30°-60°)	6399.3	61.5			
FH	(60°-80°)	1806.8	17.4			G2/5000
FVH	(80°-90°)	17.8	0.2			G1/100
BL	(0°-30°)	324.6	3.1	B1/500		
BM	(30°-60°)	390.5	3.8	B1/1000		
BH	(60°-80°)	96.7	0.9	B0/110		G0/110
BVH	(80°-90°)	1.3	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 II Short



REPORT NUMBER: P961949

CATALOG NUMBER: NAV-SB2B-740-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0
2.5°	3113.1	3074.0	3068.2	3060.5	2986.0	2930.2	2849.3	2760.7	2661.2	2559.7	2514.8
5°	3596.6	3565.8	3560.0	3524.1	3439.3	3344.3	3200.5	3018.8	2833.2	2615.0	2521.2
7.5°	3690.3	3684.6	3710.9	3709.6	3698.1	3623.0	3501.6	3285.2	3006.6	2683.0	2537.9
10°	3272.4	3287.2	3365.5	3434.2	3619.7	3727.6	3701.3	3522.8	3185.1	2760.7	2556.6
12.5°	2891.6	2874.3	2930.2	3007.9	3223.6	3544.7	3784.1	3721.2	3389.3	2848.7	2584.1
15°	2652.8	2645.7	2677.2	2713.2	2877.6	3201.1	3687.7	3882.3	3585.7	2952.6	2625.8
17.5°	2576.4	2570.7	2580.3	2589.3	2695.9	2946.3	3458.6	3981.2	3773.8	3071.4	2672.1
20°	2638.8	2631.0	2629.7	2622.7	2666.9	2837.7	3251.2	3988.3	3942.7	3179.3	2711.9
22.5°	2820.4	2811.4	2780.0	2751.7	2755.6	2852.5	3158.7	3917.7	4069.8	3280.1	2737.0
25°	3149.7	3135.0	3069.5	2974.4	2914.2	2955.3	3172.9	3824.5	4191.1	3359.0	2724.8
27.5°	3562.0	3542.7	3458.6	3317.3	3179.3	3129.2	3275.0	3760.3	4291.9	3419.4	2698.4
30°	3965.7	3940.7	3857.9	3748.1	3546.5	3388.5	3459.2	3788.6	4412.0	3482.3	2663.8
32.5°	4401.7	4378.0	4268.2	4132.1	3965.1	3752.6	3711.5	3926.6	4559.0	3570.3	2639.4
35°	4953.2	4916.0	4760.0	4574.4	4397.2	4182.1	4053.1	4164.8	4754.8	3704.5	2652.8
37.5°	5581.1	5531.0	5362.8	5106.7	4875.5	4634.7	4469.1	4492.3	5041.8	3884.2	2694.5
40°	6173.1	6127.4	5972.1	5730.7	5440.5	5148.4	4971.9	4920.4	5437.9	4103.2	2767.8
42.5°	6528.1	6487.0	6421.5	6319.4	6074.8	5776.9	5554.2	5443.1	5906.6	4365.1	2857.0
45°	6548.0	6512.0	6600.0	6718.8	6670.6	6472.3	6200.6	5997.2	6377.2	4611.0	2949.4
47.5°	6229.5	6205.1	6472.3	6887.0	7093.7	7177.2	6926.7	6505.0	6765.6	4787.6	2987.4
50°	5361.6	5352.5	5902.2	6663.5	7254.8	7794.8	7692.7	6977.5	7066.8	4878.7	2951.4
52.5°	4648.9	4616.2	4936.5	5948.4	7020.5	8119.6	8441.3	7441.1	7277.3	4896.0	2867.2
55°	3526.0	3497.1	3899.0	4751.6	6264.9	8004.1	8988.9	7919.4	7428.2	4851.7	2716.4
57.5°	1891.4	1873.4	2381.3	3162.6	4897.3	7310.7	9087.9	8425.3	7555.3	4734.3	2505.2
60°	736.4	733.2	923.2	1534.4	2976.4	5947.7	8589.0	8728.9	7634.9	4589.8	2328.6
62.5°	445.6	455.2	486.1	688.9	1314.9	3694.8	7439.1	8383.6	7688.2	4457.5	2182.8
65°	368.5	369.2	373.0	473.1	629.9	1546.0	5600.4	7247.2	7556.6	4222.0	1976.1
67.5°	315.9	321.6	336.4	375.6	444.2	677.9	3224.2	5613.8	6756.0	3673.7	1653.8
70°	249.1	256.8	275.4	308.8	342.9	424.4	1191.6	3735.3	5161.2	2769.0	1250.7
72.5°	209.9	209.3	218.9	251.0	272.2	298.6	458.4	2092.9	2999.6	1321.9	618.9
75°	162.5	168.8	181.0	209.9	222.7	216.4	248.5	764.6	1074.7	400.7	210.5
77.5°	127.1	132.2	143.2	171.4	184.3	153.4	143.2	273.5	345.4	143.8	95.0
80°	57.1	61.6	97.6	126.5	150.3	105.9	77.7	139.9	153.4	65.5	48.2
82.5°	10.2	17.3	57.1	66.7	77.1	68.7	40.5	72.6	75.1	26.3	16.7
85°	0.6	1.3	19.9	24.4	30.9	22.4	12.2	28.9	25.0	9.0	6.5
87.5°	0.0	0.0	0.0	0.6	0.6	3.2	3.9	5.1	3.9	3.2	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P961949

CATALOG NUMBER: NAV-SB2B-740-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0	2509.0
2.5°	2468.6	2377.4	2288.8	2216.3	2173.9	2102.0	2054.5	2046.7	2026.8	2044.2
5°	2421.0	2258.0	2092.9	1945.3	1824.0	1667.4	1550.5	1501.0	1458.1	1472.8
7.5°	2398.6	2141.1	1884.4	1632.0	1372.7	1122.3	936.0	858.3	799.3	807.7
10°	2368.5	2019.8	1617.2	1232.0	884.7	637.6	509.1	461.7	435.3	435.9
12.5°	2345.3	1874.7	1307.2	835.3	538.6	407.0	367.3	355.7	348.0	348.6
15°	2333.7	1704.0	1000.9	556.7	385.2	344.8	335.2	330.0	324.8	324.2
17.5°	2314.4	1513.9	732.6	406.4	337.0	323.0	314.6	308.8	302.4	301.1
20°	2285.6	1298.2	535.5	343.5	315.9	304.9	293.4	285.7	278.0	276.8
22.5°	2232.3	1070.2	411.5	317.8	300.4	288.2	274.2	265.2	257.5	256.1
25°	2133.4	856.5	346.7	301.8	287.0	272.2	256.8	244.6	237.6	236.3
27.5°	2008.3	672.8	314.6	287.0	269.7	256.1	238.8	227.2	220.9	219.6
30°	1860.6	518.1	296.0	270.3	249.1	237.6	222.1	212.5	208.7	208.7
32.5°	1701.4	414.1	288.2	253.6	231.1	218.3	206.1	202.2	201.0	200.3
35°	1551.7	359.6	284.4	240.2	215.0	202.8	197.7	198.3	201.0	201.0
37.5°	1418.9	342.2	282.5	230.5	201.0	190.0	193.2	199.1	196.5	196.5
40°	1298.8	344.1	281.2	223.4	189.4	183.0	189.4	184.9	178.5	177.8
42.5°	1207.0	360.2	278.6	217.6	182.3	177.8	175.3	168.2	167.6	168.8
45°	1140.2	374.3	278.0	215.0	174.7	166.3	163.1	156.0	168.8	172.1
47.5°	1061.3	374.3	278.0	206.1	161.7	158.6	153.4	145.8	158.6	161.7
50°	959.2	350.5	267.1	195.8	151.5	149.5	140.6	131.0	128.4	130.4
52.5°	830.1	307.5	239.4	181.7	141.2	137.4	126.5	119.4	117.5	117.5
55°	683.2	257.5	202.2	161.1	130.4	123.3	115.5	112.3	110.4	109.2
57.5°	555.3	211.3	162.5	143.2	120.0	111.1	108.5	104.7	101.5	99.5
60°	455.8	166.3	134.2	127.1	109.8	101.5	100.8	95.6	87.3	86.0
62.5°	351.8	122.0	113.0	110.4	99.5	92.5	91.1	80.9	68.1	65.5
65°	248.5	95.0	91.1	97.0	88.6	82.2	78.9	63.6	50.1	48.2
67.5°	174.7	79.6	72.0	84.8	77.1	68.7	66.7	53.9	41.7	40.5
70°	124.5	64.9	59.0	72.6	61.6	60.4	56.5	44.9	34.0	32.7
72.5°	87.9	49.4	45.6	62.9	42.3	52.0	46.2	34.6	25.7	24.4
75°	64.9	35.3	32.1	36.6	30.9	39.2	32.7	23.1	16.1	15.4
77.5°	47.6	22.4	19.3	17.9	17.9	24.4	17.9	9.6	7.1	6.5
80°	33.4	10.2	9.0	7.7	7.1	5.7	2.6	1.3	0.6	0.6
82.5°	19.9	4.5	4.5	3.2	1.9	0.0	0.0	0.0	0.0	0.0
85°	4.5	1.9	1.9	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)