

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: P962569

Luminaire Tested: **NAV-SB2C-827-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962569
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-SB2C-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA 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: 11381.6 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

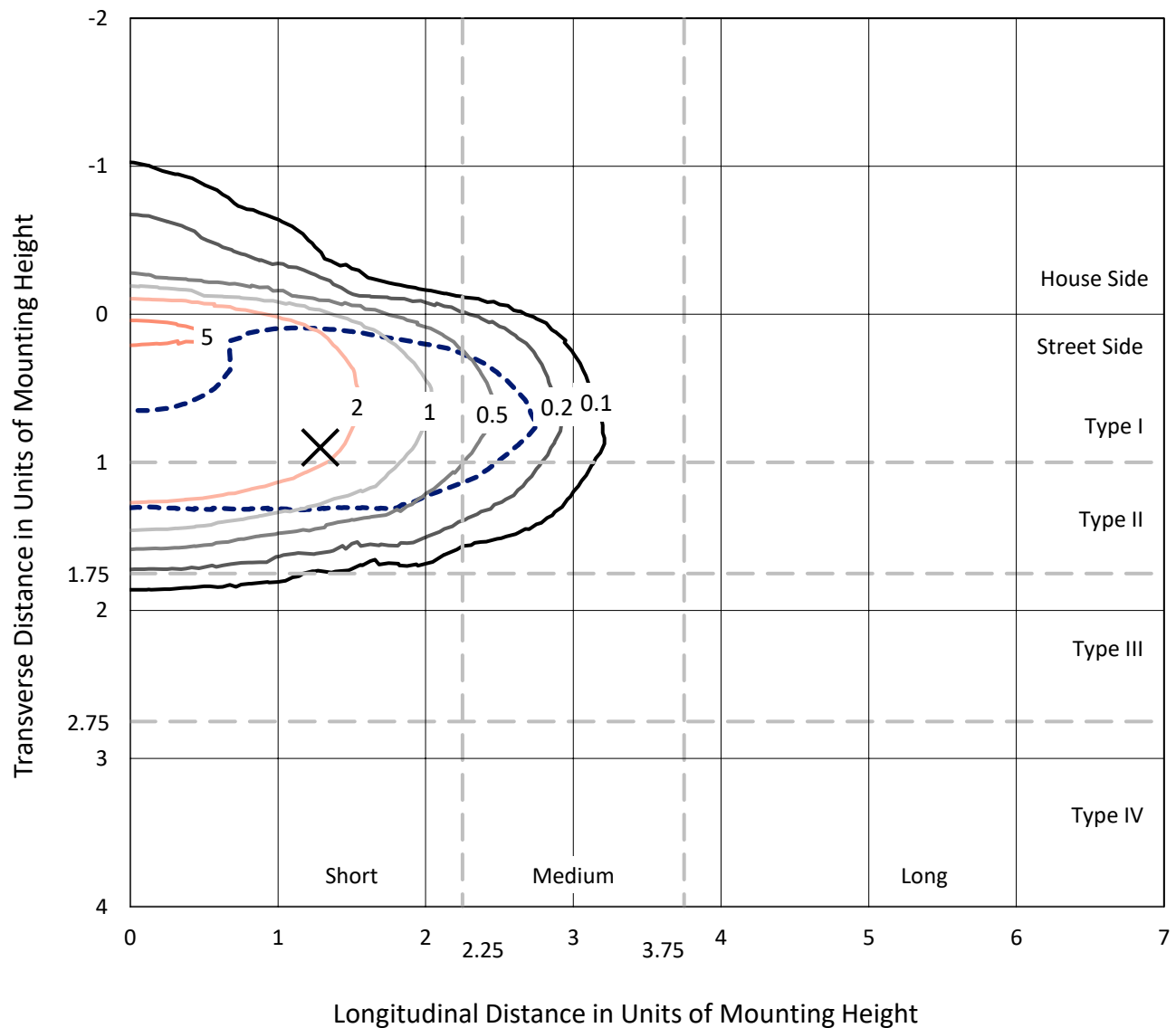
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962569
CATALOG NUMBER: NAV-SB2C-827-U-AFL-HSS

Iso-Footcandle Lines of Horizontal Illumination

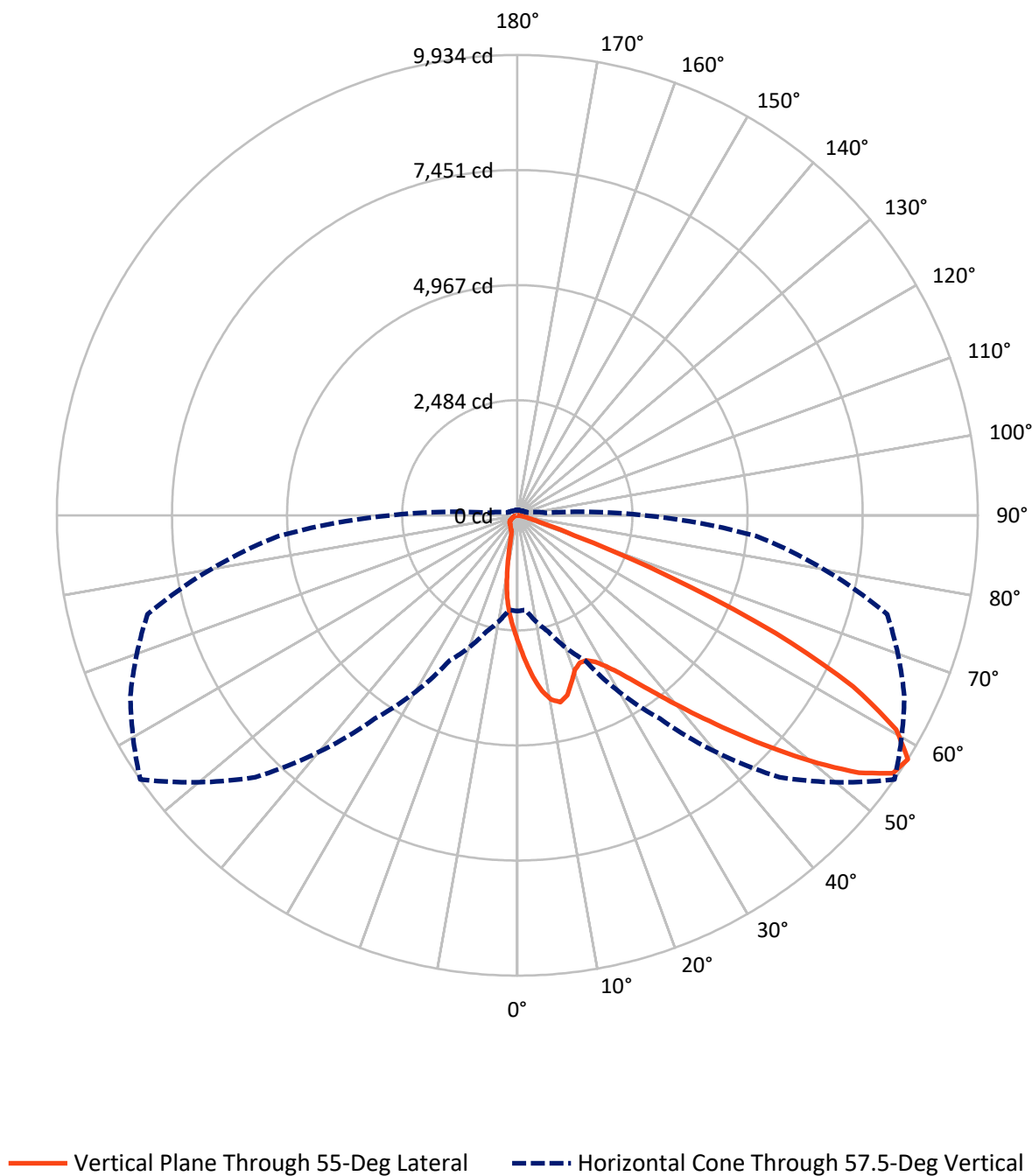
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type II - Short - N/A

REPORT NUMBER: P962569
CATALOG NUMBER: NAV-SB2C-827-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P962569

CATALOG NUMBER: NAV-SB2C-827-U-AFL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	888.9	0.0	888.9
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	10492.7	0.0	10492.7
	% Fixture	92.2	0.0	92.2
Total	Lumens	11381.6	0.0	11381.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.2	2.2
10°-20°	616.4	5.4
20°-30°	986.3	8.7
30°-40°	1669.3	14.7
40°-50°	2740.6	24.1
50°-60°	3012.2	26.5
60°-70°	1727.8	15.2
70°-80°	353.0	3.1
80°-90°	20.8	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°	11381.6	100.0
0°-180°	11381.6	100.0

Coefficient of Utilization



REPORT NUMBER: P962569

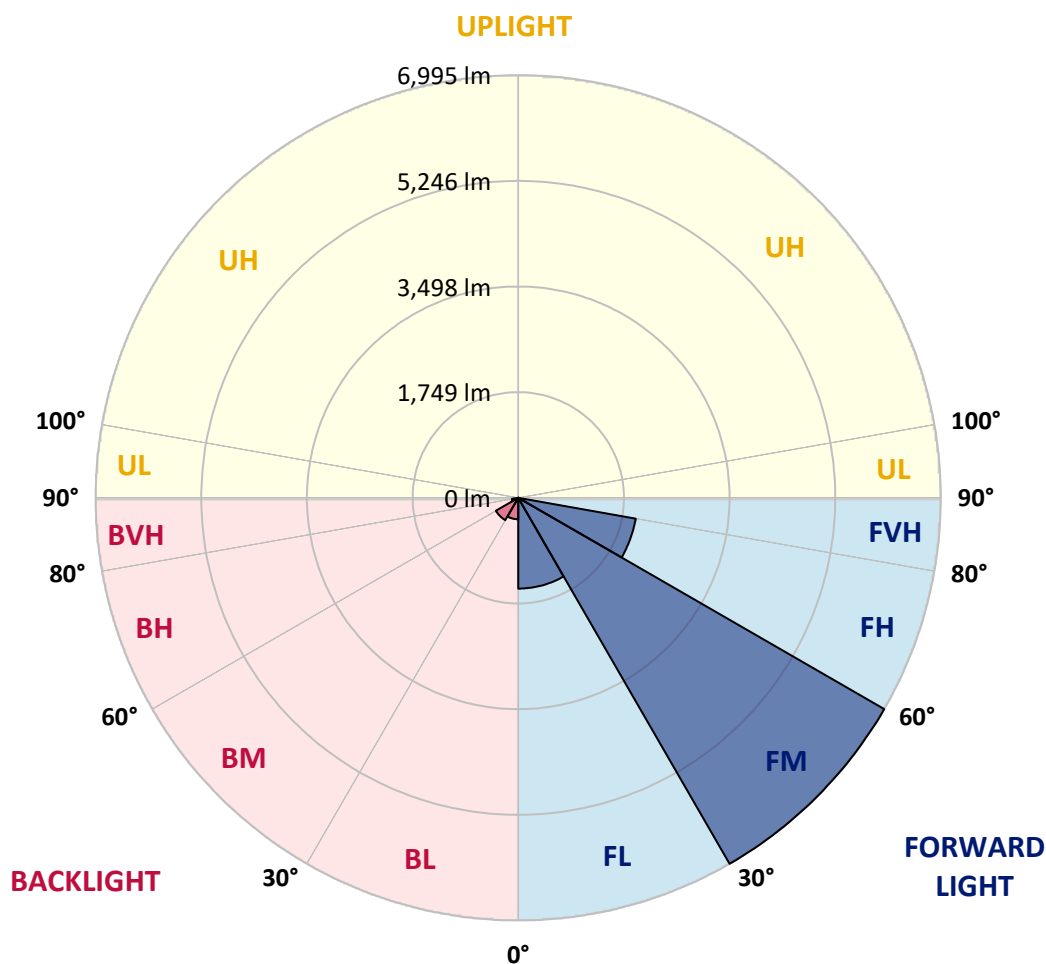
CATALOG NUMBER: NAV-SB2C-827-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1503.0	13.2			
FM	(30°-60°)	6995.2	61.5			
FH	(60°-80°)	1975.1	17.4			G2/5000
FVH	(80°-90°)	19.4	0.2			G1/100
BL	(0°-30°)	354.9	3.1	B1/500		
BM	(30°-60°)	426.9	3.8	B1/1000		
BH	(60°-80°)	105.7	0.9	B0/110		G0/110
BVH	(80°-90°)	1.4	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: P962569

CATALOG NUMBER: NAV-SB2C-827-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7
2.5°	3403.1	3360.3	3354.0	3345.5	3264.1	3203.1	3114.7	3017.8	2909.1	2798.1	2749.0
5°	3931.6	3897.9	3891.5	3852.3	3759.6	3655.8	3498.5	3299.9	3097.1	2858.5	2756.0
7.5°	4034.0	4027.7	4056.4	4055.1	4042.4	3960.3	3827.7	3591.2	3286.6	2932.8	2774.3
10°	3577.1	3593.2	3678.9	3754.0	3956.8	4074.7	4046.0	3850.8	3481.7	3017.8	2794.7
12.5°	3161.0	3142.0	3203.1	3288.0	3523.8	3874.7	4136.5	4067.7	3704.9	3114.0	2824.8
15°	2899.9	2892.1	2926.6	2965.8	3145.5	3499.2	4031.2	4243.9	3919.6	3227.6	2870.4
17.5°	2816.4	2810.0	2820.6	2830.4	2946.9	3220.7	3780.7	4351.9	4125.2	3357.5	2920.9
20°	2884.5	2876.0	2874.6	2866.9	2915.3	3102.1	3554.0	4359.6	4309.8	3475.4	2964.5
22.5°	3083.1	3073.3	3038.8	3008.0	3012.2	3118.2	3452.9	4282.4	4448.8	3585.6	2991.9
25°	3443.1	3427.0	3355.3	3251.5	3185.5	3230.5	3468.4	4180.7	4581.4	3671.9	2978.4
27.5°	3893.7	3872.7	3780.7	3626.2	3475.4	3420.6	3579.9	4110.6	4691.6	3737.9	2949.7
30°	4335.1	4307.8	4217.2	4097.2	3876.9	3704.1	3781.3	4141.4	4822.8	3806.6	2911.8
32.5°	4811.7	4785.6	4665.7	4516.9	4334.4	4102.0	4057.2	4292.3	4983.5	3902.8	2885.2
35°	5414.5	5373.8	5203.2	5000.5	4806.7	4571.6	4430.6	4552.6	5197.7	4049.5	2899.9
37.5°	6100.9	6046.2	5862.3	5582.3	5329.6	5066.4	4885.4	4910.6	5511.3	4246.0	2945.5
40°	6747.9	6698.1	6528.2	6264.4	5947.2	5627.9	5434.9	5378.7	5944.4	4485.3	3025.5
42.5°	7136.0	7091.2	7019.5	6908.0	6640.6	6314.9	6071.4	5949.9	6456.7	4771.6	3123.1
45°	7157.8	7118.5	7214.7	7344.4	7291.8	7075.0	6778.1	6555.6	6971.1	5040.4	3224.1
47.5°	6809.7	6783.0	7075.0	7528.3	7754.3	7845.6	7571.9	7110.7	7395.7	5233.4	3265.5
50°	5860.8	5851.0	6451.8	7284.2	7930.5	8520.7	8409.1	7627.3	7724.8	5333.1	3226.2
52.5°	5081.8	5046.1	5396.2	6502.3	7674.3	8875.8	9227.5	8134.0	7955.0	5352.0	3134.3
55°	3854.3	3822.7	4262.2	5194.1	6848.3	8749.5	9826.1	8656.8	8119.9	5303.6	2969.3
57.5°	2067.5	2047.8	2603.0	3457.1	5353.5	7991.5	9934.2	9209.9	8258.9	5175.1	2738.5
60°	804.9	801.4	1009.2	1677.3	3253.6	6501.6	9388.9	9541.8	8346.0	5017.3	2545.5
62.5°	487.1	497.5	531.3	753.1	1437.4	4038.9	8131.9	9164.3	8404.2	4872.6	2386.2
65°	402.8	403.5	407.7	517.2	688.5	1689.9	6121.9	7922.0	8260.4	4615.2	2160.2
67.5°	345.3	351.6	367.8	410.5	485.6	741.1	3524.5	6136.7	7385.2	4015.7	1807.9
70°	272.3	280.7	301.0	337.5	374.7	463.9	1302.6	4083.2	5641.9	3026.9	1367.1
72.5°	229.5	228.8	239.3	274.4	297.6	326.4	501.1	2287.9	3278.9	1445.0	676.5
75°	177.5	184.6	197.9	229.5	243.5	236.5	271.6	835.9	1174.9	438.0	230.2
77.5°	139.0	144.5	156.5	187.4	201.4	167.7	156.5	299.0	377.6	157.2	103.8
80°	62.4	67.3	106.7	138.3	164.2	115.8	84.9	153.0	167.7	71.5	52.7
82.5°	11.3	19.0	62.4	73.0	84.3	75.1	44.2	79.3	82.1	28.8	18.2
85°	0.7	1.4	21.7	26.6	33.7	24.6	13.3	31.6	27.4	9.8	7.0
87.5°	0.0	0.0	0.0	0.7	0.7	3.5	4.2	5.6	4.2	3.5	2.8
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: P962569

CATALOG NUMBER: NAV-SB2C-827-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7	2742.7
2.5°	2698.5	2598.8	2501.9	2422.7	2376.4	2297.7	2245.8	2237.4	2215.6	2234.6
5°	2646.5	2468.3	2287.9	2126.5	1993.8	1822.7	1694.8	1640.8	1593.8	1610.0
7.5°	2622.0	2340.6	2059.8	1784.0	1500.5	1226.7	1023.3	938.3	873.7	882.8
10°	2588.9	2208.0	1767.8	1346.7	967.1	696.9	556.6	504.6	475.8	476.5
12.5°	2563.7	2049.3	1428.8	913.1	588.9	445.0	401.4	388.8	380.4	381.1
15°	2551.1	1862.6	1094.1	608.4	421.1	376.9	366.3	360.7	355.2	354.4
17.5°	2530.0	1654.9	800.7	444.2	368.5	353.0	343.9	337.5	330.6	329.1
20°	2498.4	1419.1	585.3	375.5	345.3	333.3	320.7	312.3	303.9	302.5
22.5°	2440.2	1169.9	449.9	347.4	328.4	315.1	299.7	289.9	281.5	280.0
25°	2332.1	936.2	378.9	329.8	313.8	297.6	280.7	267.4	259.6	258.3
27.5°	2195.2	735.5	343.9	313.8	294.8	280.0	261.1	248.5	241.4	240.1
30°	2033.8	566.3	323.5	295.5	272.3	259.6	242.8	232.3	228.1	228.1
32.5°	1859.8	452.6	315.1	277.3	252.7	238.6	225.3	221.1	219.7	218.9
35°	1696.3	393.0	310.9	262.5	235.1	221.8	216.2	216.9	219.7	219.7
37.5°	1551.0	374.0	308.8	251.9	219.7	207.8	211.3	217.6	214.7	214.7
40°	1419.7	376.2	307.4	244.3	207.0	200.0	207.0	202.1	195.1	194.4
42.5°	1319.4	393.7	304.6	237.9	199.4	194.4	191.6	183.9	183.2	184.6
45°	1246.4	409.2	303.9	235.1	190.9	181.7	178.2	170.6	184.6	188.1
47.5°	1160.1	409.2	303.9	225.3	176.8	173.3	167.7	159.3	173.3	176.8
50°	1048.5	383.1	291.9	214.0	165.6	163.5	153.6	143.2	140.3	142.5
52.5°	907.4	336.2	261.8	198.6	154.4	150.2	138.3	130.6	128.4	128.4
55°	746.7	281.5	221.1	176.2	142.5	134.8	126.3	122.8	120.7	119.3
57.5°	607.1	230.9	177.5	156.5	131.2	121.5	118.6	114.4	110.9	108.8
60°	498.3	181.7	146.7	139.0	120.0	110.9	110.2	104.6	95.4	94.0
62.5°	384.6	133.4	123.5	120.7	108.8	101.1	99.6	88.5	74.4	71.5
65°	271.6	103.8	99.6	106.0	96.9	89.8	86.3	69.5	54.7	52.7
67.5°	190.9	87.0	78.6	92.7	84.3	75.1	73.0	58.9	45.6	44.2
70°	136.1	70.9	64.6	79.3	67.3	66.0	61.8	49.1	37.2	35.8
72.5°	96.1	54.0	49.8	68.8	46.3	56.9	50.5	37.9	28.1	26.6
75°	70.9	38.6	35.1	40.0	33.7	42.8	35.8	25.2	17.5	16.8
77.5°	52.0	24.6	21.0	19.7	19.7	26.6	19.7	10.6	7.7	7.0
80°	36.5	11.3	9.8	8.4	7.7	6.4	2.8	1.4	0.7	0.7
82.5°	21.7	4.9	4.9	3.5	2.2	0.0	0.0	0.0	0.0	0.0
85°	4.9	2.2	2.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.7	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)