

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: P963623

Luminaire Tested: **NAV-SB3A-827-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963623
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-SB3A-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

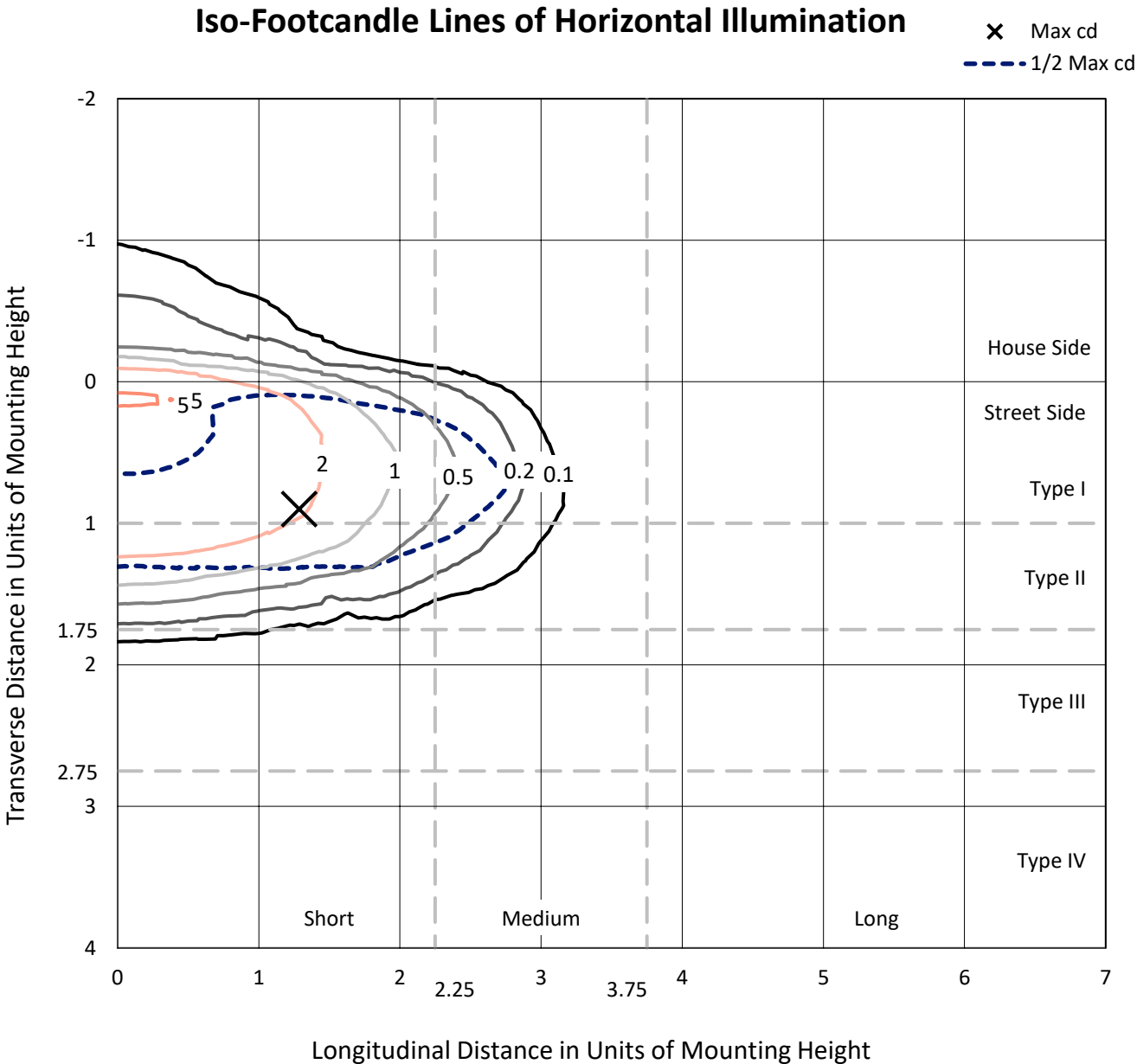
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10228.5 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 84.7
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



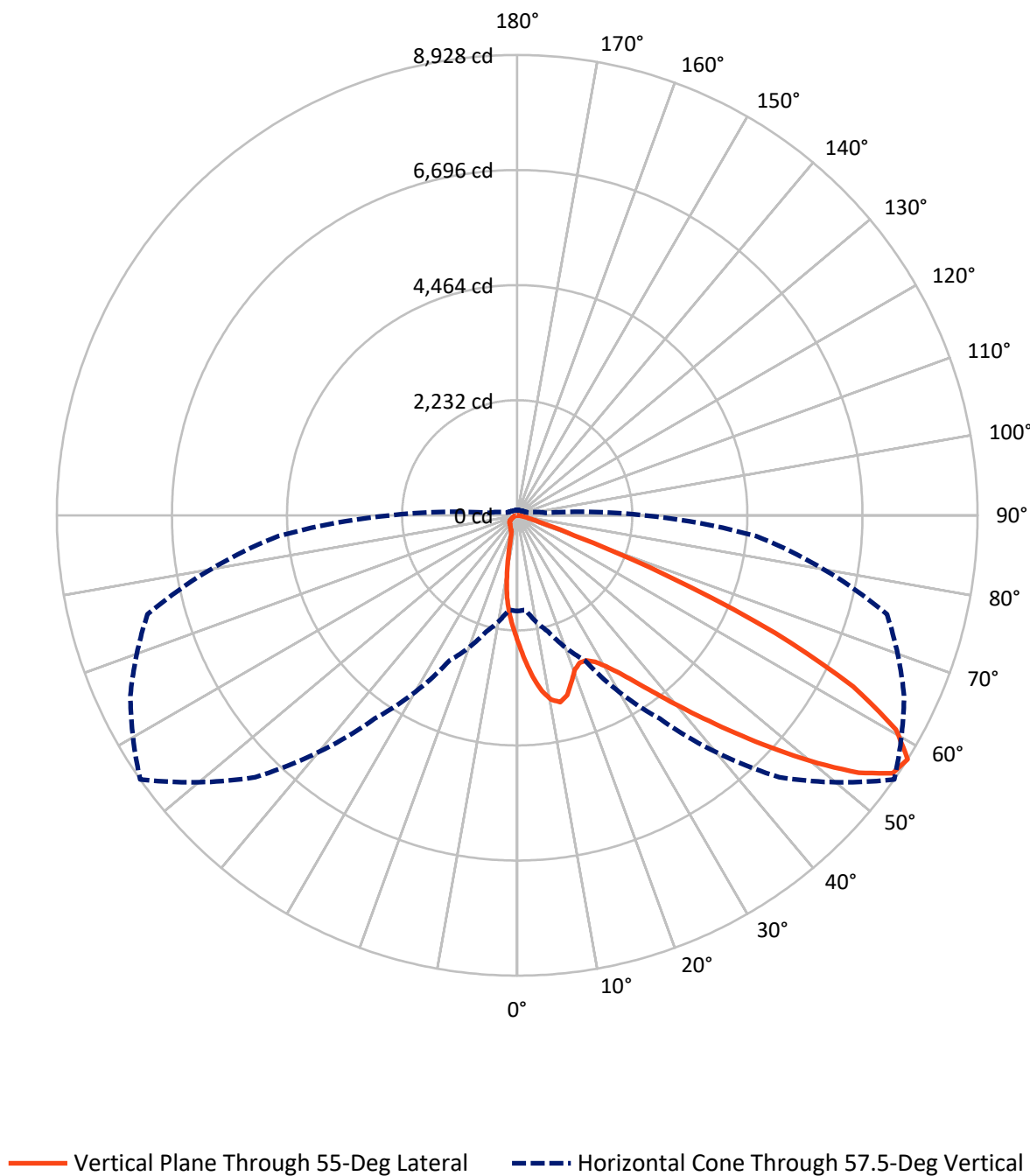
REPORT NUMBER: P963623
CATALOG NUMBER: NAV-SB3A-827-U-AFL-HSS



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
Type II - Short - N/A

REPORT NUMBER: P963623
CATALOG NUMBER: NAV-SB3A-827-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963623

CATALOG NUMBER: NAV-SB3A-827-U-AFL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	798.8	0.0	798.8
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	9429.7	0.0	9429.7
	% Fixture	92.2	0.0	92.2
Total	Lumens	10228.5	0.0	10228.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.3	2.2
10°-20°	554.0	5.4
20°-30°	886.3	8.7
30°-40°	1500.2	14.7
40°-50°	2463.0	24.1
50°-60°	2707.0	26.5
60°-70°	1552.7	15.2
70°-80°	317.3	3.1
80°-90°	18.7	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°	10228.5	100.0
0°-180°	10228.5	100.0

Coefficient of Utilization



REPORT NUMBER: P963623

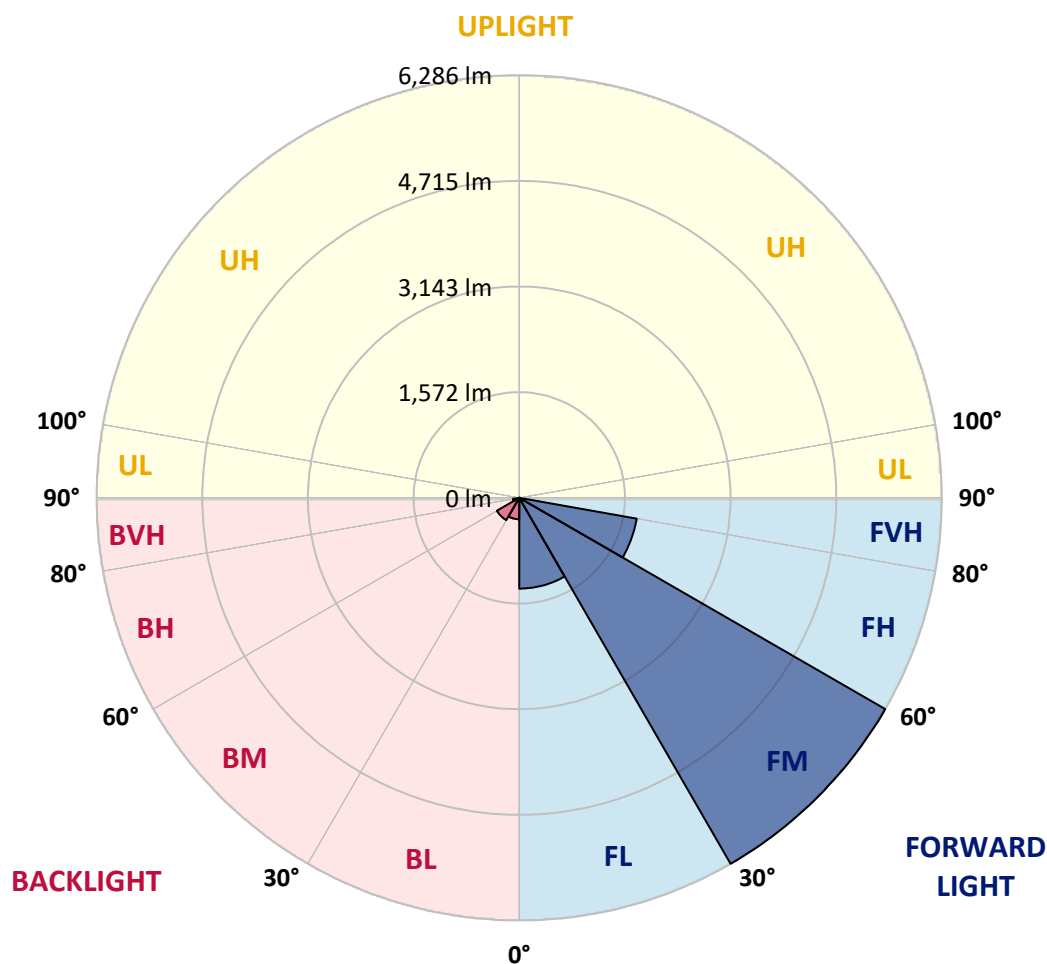
CATALOG NUMBER: NAV-SB3A-827-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1350.7	13.2			
FM	(30°-60°)	6286.5	61.5			
FH	(60°-80°)	1775.0	17.4			G1/1800
FVH	(80°-90°)	17.5	0.2			G1/100
BL	(0°-30°)	318.9	3.1	B1/500		
BM	(30°-60°)	383.6	3.8	B1/1000		
BH	(60°-80°)	95.0	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-G1

Type II Short



REPORT NUMBER: P963623

CATALOG NUMBER: NAV-SB3A-827-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8
2.5°	3058.3	3019.9	3014.1	3006.6	2933.4	2878.5	2799.1	2712.0	2614.3	2514.6	2470.5
5°	3533.3	3502.9	3497.3	3461.9	3378.7	3285.3	3144.1	2965.6	2783.3	2568.9	2476.8
7.5°	3625.3	3619.7	3645.5	3644.3	3632.9	3559.1	3439.9	3227.3	2953.6	2635.7	2493.2
10°	3214.7	3229.3	3306.1	3373.7	3555.9	3661.9	3636.1	3460.7	3128.9	2712.0	2511.5
12.5°	2840.7	2823.7	2878.5	2954.9	3166.8	3482.1	3717.4	3655.6	3329.5	2798.5	2538.6
15°	2606.1	2599.2	2630.0	2665.4	2826.8	3144.7	3622.8	3813.9	3522.5	2900.6	2579.6
17.5°	2531.0	2525.4	2534.8	2543.6	2648.4	2894.3	3397.7	3911.0	3707.3	3017.3	2625.0
20°	2592.2	2584.6	2583.4	2576.4	2620.0	2787.7	3193.9	3918.0	3873.2	3123.3	2664.1
22.5°	2770.7	2761.9	2731.0	2703.2	2707.0	2802.2	3103.1	3848.6	3998.0	3222.3	2688.7
25°	3094.3	3079.7	3015.4	2922.1	2862.8	2903.1	3116.9	3757.1	4117.2	3299.9	2676.7
27.5°	3499.1	3480.3	3397.7	3258.9	3123.3	3074.1	3217.3	3694.1	4216.3	3359.1	2650.9
30°	3895.9	3871.3	3789.9	3682.1	3484.1	3328.9	3398.3	3721.8	4334.2	3420.9	2616.8
32.5°	4324.2	4300.8	4193.0	4059.2	3895.3	3686.5	3646.1	3857.4	4478.6	3507.3	2592.8
35°	4865.9	4829.3	4676.0	4493.8	4319.8	4108.4	3981.7	4091.4	4671.0	3639.2	2606.1
37.5°	5482.7	5433.5	5268.3	5016.7	4789.6	4553.0	4390.4	4413.0	4953.0	3815.8	2647.1
40°	6064.3	6019.5	5866.9	5629.7	5344.7	5057.7	4884.2	4833.8	5342.1	4030.8	2719.0
42.5°	6413.0	6372.7	6308.4	6208.1	5967.8	5675.1	5456.3	5347.1	5802.5	4288.2	2806.7
45°	6432.6	6397.2	6483.6	6600.4	6553.0	6358.2	6091.4	5891.5	6264.8	4529.8	2897.5
47.5°	6119.8	6095.8	6358.2	6765.6	6968.7	7050.7	6804.7	6390.4	6646.4	4703.2	2934.7
50°	5267.1	5258.2	5798.1	6546.2	7127.0	7657.5	7557.1	6854.6	6942.2	4792.8	2899.4
52.5°	4567.0	4534.8	4849.5	5843.5	6896.8	7976.6	8292.6	7309.9	7149.1	4809.8	2816.7
55°	3463.9	3435.5	3830.3	4667.8	6154.4	7863.1	8830.6	7779.7	7297.3	4766.2	2668.5
57.5°	1858.0	1840.4	2339.3	3106.9	4811.0	7181.9	8927.6	8276.8	7422.2	4650.8	2461.0
60°	723.4	720.3	906.9	1507.4	2924.0	5842.9	8437.6	8575.2	7500.4	4509.0	2287.6
62.5°	437.7	447.2	477.4	676.7	1291.7	3629.7	7308.0	8235.8	7552.7	4379.0	2144.4
65°	362.0	362.6	366.4	464.8	618.7	1518.7	5501.7	7119.4	7423.5	4147.6	1941.4
67.5°	310.3	316.0	330.5	369.0	436.4	666.0	3167.5	5514.9	6637.0	3608.9	1624.7
70°	244.7	252.3	270.6	303.4	336.8	416.9	1170.6	3669.5	5070.3	2720.2	1228.7
72.5°	206.2	205.6	215.0	246.6	267.4	293.3	450.3	2056.1	2946.7	1298.7	608.0
75°	159.6	165.8	177.8	206.2	218.8	212.6	244.1	751.2	1055.9	393.6	206.8
77.5°	124.8	130.0	140.6	168.4	181.0	150.8	140.6	268.7	339.3	141.2	93.4
80°	56.2	60.6	95.8	124.2	147.6	104.0	76.4	137.5	150.8	64.4	47.3
82.5°	10.0	17.0	56.2	65.6	75.6	67.4	39.8	71.2	73.8	25.8	16.4
85°	0.6	1.2	19.6	24.0	30.2	22.0	12.0	28.4	24.6	8.8	6.4
87.5°	0.0	0.0	0.0	0.6	0.6	3.2	3.8	5.0	3.8	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: P963623

CATALOG NUMBER: NAV-SB3A-827-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8	2464.8
2.5°	2425.0	2335.6	2248.4	2177.2	2135.6	2065.0	2018.2	2010.7	1991.2	2008.2
5°	2378.4	2218.2	2056.1	1911.0	1791.8	1637.9	1523.1	1474.6	1432.3	1446.9
7.5°	2356.4	2103.4	1851.2	1603.3	1348.5	1102.5	919.5	843.3	785.3	793.5
10°	2326.6	1984.2	1588.7	1210.3	869.1	626.3	500.2	453.5	427.6	428.2
12.5°	2304.0	1841.7	1284.1	820.5	529.2	399.9	360.8	349.4	341.8	342.5
15°	2292.6	1673.9	983.3	546.8	378.4	338.7	329.2	324.2	319.2	318.5
17.5°	2273.7	1487.2	719.7	399.2	331.1	317.2	309.0	303.4	297.0	295.8
20°	2245.4	1275.3	526.0	337.4	310.3	299.6	288.2	280.6	273.1	271.8
22.5°	2193.0	1051.3	404.3	312.2	295.2	283.2	269.3	260.5	252.9	251.6
25°	2095.8	841.3	340.6	296.4	282.0	267.4	252.3	240.3	233.4	232.1
27.5°	1972.8	661.0	309.0	282.0	264.9	251.6	234.6	223.2	217.0	215.7
30°	1827.8	509.0	290.8	265.6	244.7	233.4	218.2	208.8	205.0	205.0
32.5°	1671.4	406.8	283.2	249.2	227.0	214.4	202.4	198.6	197.4	196.8
35°	1524.4	353.2	279.4	235.9	211.3	199.3	194.2	194.9	197.4	197.4
37.5°	1393.9	336.2	277.5	226.4	197.4	186.7	189.8	195.6	193.0	193.0
40°	1275.9	338.0	276.2	219.5	186.0	179.8	186.0	181.6	175.4	174.7
42.5°	1185.7	353.8	273.8	213.8	179.2	174.7	172.2	165.2	164.6	165.8
45°	1120.1	367.7	273.1	211.3	171.6	163.4	160.2	153.2	165.8	169.0
47.5°	1042.5	367.7	273.1	202.4	159.0	155.8	150.8	143.2	155.8	159.0
50°	942.3	344.4	262.4	192.4	148.8	147.0	138.2	128.6	126.2	128.0
52.5°	815.5	302.1	235.2	178.5	138.8	135.0	124.2	117.4	115.4	115.4
55°	671.1	252.9	198.6	158.3	128.0	121.1	113.6	110.4	108.4	107.2
57.5°	545.6	207.5	159.6	140.6	118.0	109.2	106.6	102.8	99.6	97.8
60°	447.8	163.4	131.8	124.8	107.8	99.6	99.0	94.0	85.8	84.6
62.5°	345.6	119.8	111.0	108.4	97.8	90.8	89.6	79.4	66.8	64.4
65°	244.1	93.4	89.6	95.2	87.0	80.8	77.6	62.4	49.2	47.3
67.5°	171.6	78.2	70.6	83.2	75.6	67.4	65.6	53.0	41.0	39.8
70°	122.4	63.7	58.0	71.2	60.6	59.2	55.5	44.2	33.4	32.2
72.5°	86.4	48.6	44.8	61.8	41.6	51.0	45.4	34.0	25.2	24.0
75°	63.7	34.6	31.6	36.0	30.2	38.4	32.2	22.8	15.8	15.2
77.5°	46.6	22.0	19.0	17.6	17.6	24.0	17.6	9.4	7.0	6.4
80°	32.8	10.0	8.8	7.6	7.0	5.6	2.6	1.2	0.6	0.6
82.5°	19.6	4.4	4.4	3.2	1.8	0.0	0.0	0.0	0.0	0.0
85°	4.4	1.8	1.8	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)