

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: P881726

Luminaire Tested: **NAV-SB1B-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881726
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4115 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

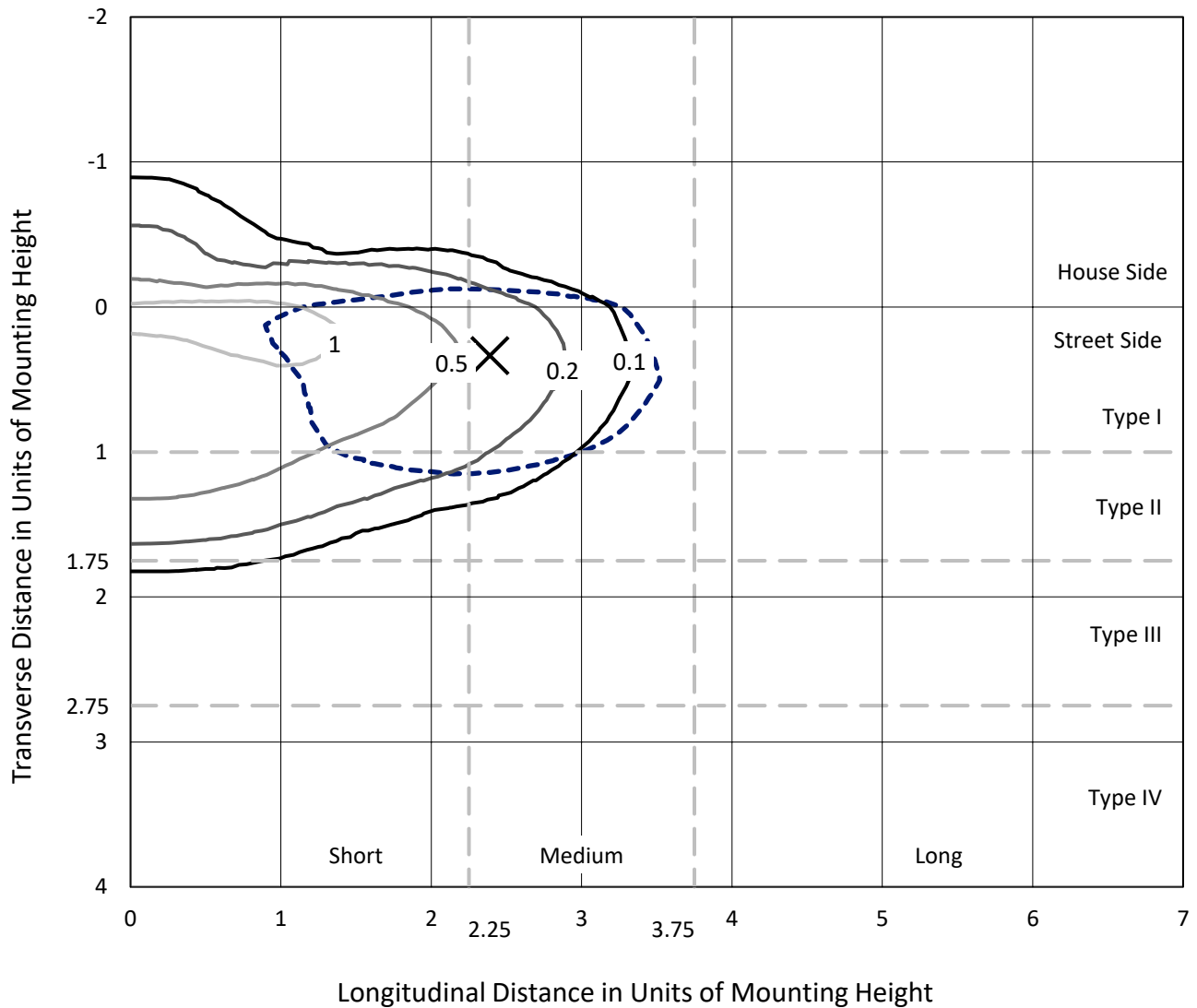
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881726
 CATALOG NUMBER: NAV-SB1B-735-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

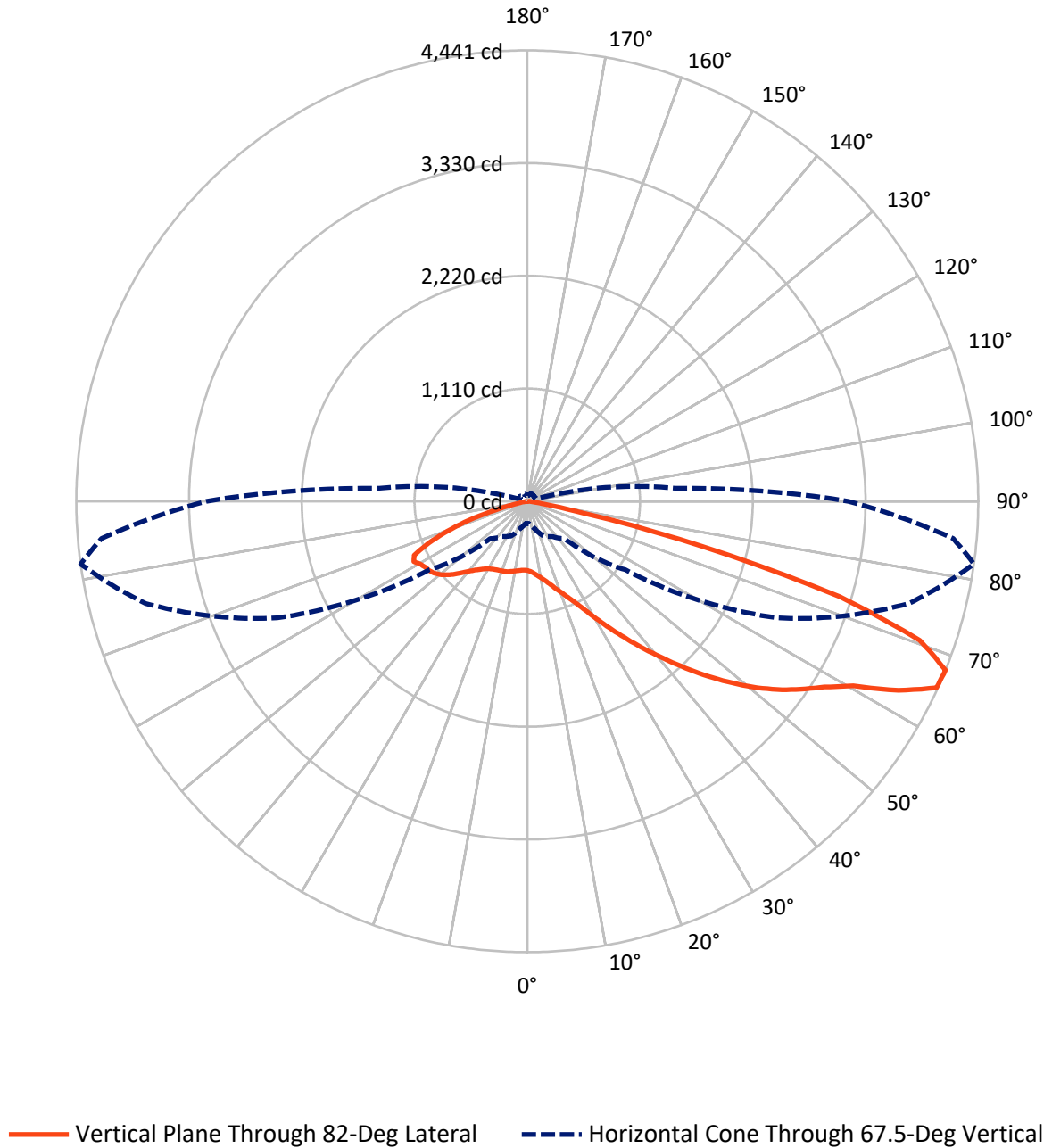
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P881726
CATALOG NUMBER: NAV-SB1B-735-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P881726

CATALOG NUMBER: NAV-SB1B-735-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	745.4	0.0	745.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3369.6	0.0	3369.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	4115.0	0.0	4115.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	1.5
10°-20°	157.8	3.8
20°-30°	252.8	6.1
30°-40°	447.0	10.9
40°-50°	783.2	19.0
50°-60°	1044.6	25.4
60°-70°	972.4	23.6
70°-80°	373.2	9.1
80°-90°	23.2	0.6
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°	4115.0	100.0
0°-180°	4115.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881726

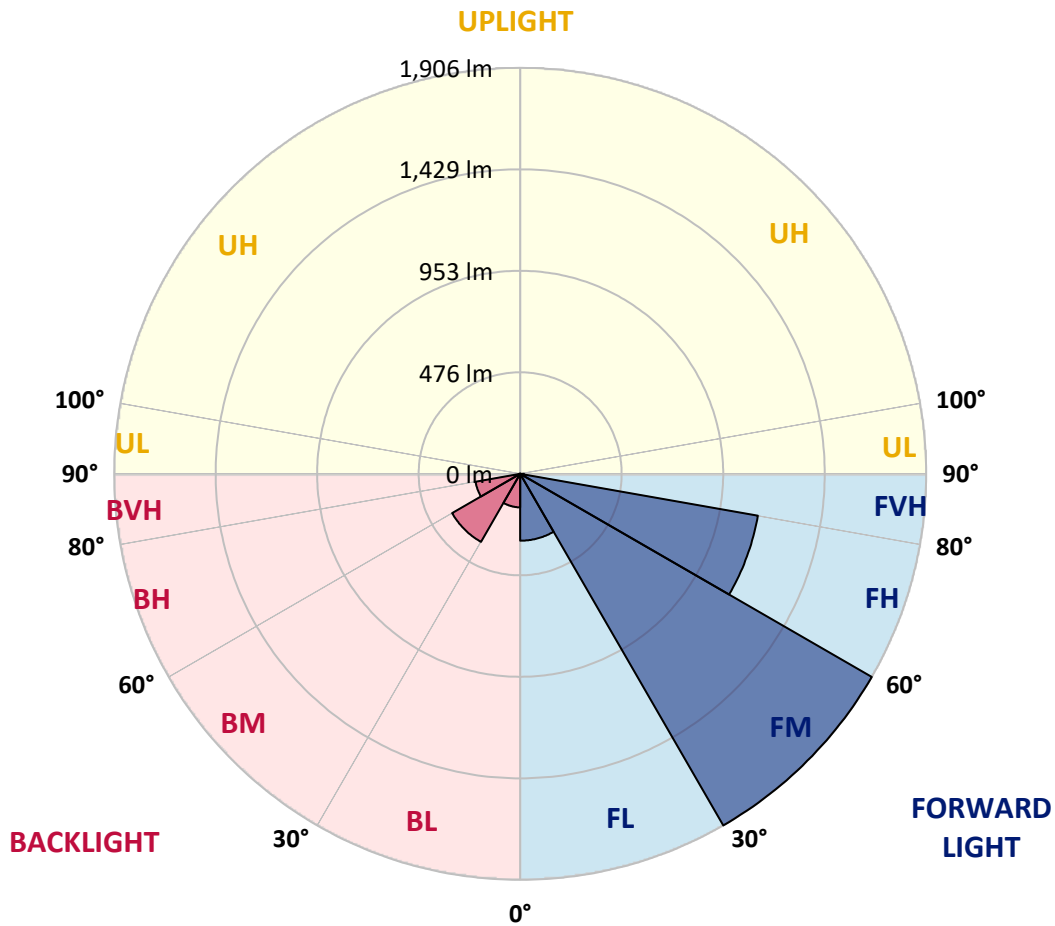
CATALOG NUMBER: NAV-SB1B-735-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	313.9	7.6			
FM (30°-60°)	1905.9	46.3			
FH (60°-80°)	1132.9	27.5			G1/1800
FVH (80°-90°)	16.9	0.4			G1/100
BL (0°-30°)	157.4	3.8	B1/500		
BM (30°-60°)	368.9	9.0	B1/1000		
BH (60°-80°)	212.7	5.2	B1/500		G1/500
BVH (80°-90°)	6.3	0.2			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 Medium



REPORT NUMBER: P881726

CATALOG NUMBER: NAV-SB1B-735-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7
2.5°	720.5	724.7	722.3	721.1	719.0	716.1	713.7	706.3	698.6	693.6	691.8
5°	735.0	739.2	738.9	740.1	741.6	742.5	741.9	733.6	722.6	714.0	709.0
7.5°	722.6	727.3	731.2	737.1	747.5	758.5	763.8	762.0	750.7	738.9	732.7
10°	687.3	692.4	701.6	715.5	737.4	761.1	781.0	790.2	783.0	770.0	761.4
12.5°	622.8	627.8	645.9	676.1	712.8	754.0	791.9	816.5	818.3	805.3	795.2
15°	550.2	555.2	574.5	612.4	668.4	734.5	797.9	844.4	860.1	848.8	836.7
17.5°	505.1	509.6	524.1	554.6	613.0	695.3	795.8	874.0	909.8	901.0	886.4
20°	491.5	495.4	502.2	523.5	572.1	654.8	782.2	901.8	963.5	958.4	942.1
22.5°	506.0	509.6	511.7	521.1	551.7	628.1	765.0	930.3	1025.7	1026.3	1006.4
25°	539.5	543.1	540.7	546.6	559.9	619.8	758.5	963.8	1103.9	1110.4	1087.9
27.5°	594.6	594.9	589.3	589.0	591.1	632.2	765.3	999.6	1202.6	1214.7	1186.9
30°	705.1	700.7	679.0	655.6	645.0	669.6	784.2	1042.0	1319.0	1340.6	1305.7
32.5°	875.5	869.0	829.3	773.3	717.0	729.7	818.3	1090.3	1445.8	1484.9	1442.2
35°	1060.3	1058.6	1017.1	933.8	835.5	815.3	873.7	1153.7	1584.2	1646.4	1595.7
37.5°	1232.2	1231.3	1207.6	1109.5	989.8	934.7	962.6	1236.6	1732.3	1822.4	1762.5
40°	1389.2	1391.9	1368.2	1280.5	1159.9	1087.9	1083.5	1339.1	1897.0	2014.0	1942.9
42.5°	1524.9	1527.9	1503.9	1439.0	1327.9	1257.4	1231.9	1464.8	2057.9	2219.9	2135.8
45°	1617.0	1635.4	1631.9	1580.0	1500.3	1427.1	1410.2	1622.4	2241.3	2438.3	2339.6
47.5°	1643.1	1660.0	1686.7	1693.8	1645.2	1573.2	1593.3	1812.3	2426.7	2656.9	2544.7
50°	1578.8	1594.5	1649.9	1723.7	1757.5	1735.3	1771.4	2015.8	2616.7	2875.0	2745.8
52.5°	1452.0	1468.0	1537.9	1654.7	1792.4	1862.4	1950.0	2216.4	2800.6	3081.5	2936.3
55°	1268.6	1285.5	1375.3	1507.4	1725.8	1914.8	2099.1	2416.7	2969.2	3267.3	3108.2
57.5°	1019.2	1031.6	1124.9	1309.8	1558.1	1862.6	2209.0	2635.3	3128.0	3449.8	3278.5
60°	664.2	675.2	783.6	989.8	1280.2	1688.4	2230.9	2879.1	3339.0	3687.1	3508.1
62.5°	441.7	449.1	513.4	664.8	901.5	1354.0	2102.6	3073.8	3648.3	4100.1	3901.9
65°	303.1	310.5	374.8	480.3	582.5	895.6	1733.8	3048.0	3928.5	4428.0	4193.7
67.5°	216.3	222.5	277.0	376.6	421.6	520.2	1175.3	2718.6	3888.2	4440.5	4209.4
70°	154.9	158.5	203.5	293.3	335.1	312.6	653.6	2079.2	3404.4	4100.4	3888.8
72.5°	108.4	109.6	141.3	223.4	269.9	228.1	311.1	1386.2	2574.9	3218.4	3014.8
75°	73.5	75.0	95.1	163.8	216.6	174.2	164.7	743.3	1511.6	1781.5	1596.9
77.5°	45.0	45.6	61.3	112.0	162.1	132.7	106.1	314.9	584.8	574.2	489.4
80°	25.5	25.5	39.1	69.6	110.5	85.6	74.4	133.9	185.2	162.7	143.4
82.5°	14.2	14.5	28.4	43.3	73.2	50.7	40.9	61.9	80.0	70.8	61.6
85°	5.9	6.5	17.5	20.4	35.0	25.2	16.6	26.1	29.6	26.4	19.3
87.5°	0.6	0.9	5.3	3.9	4.1	5.0	2.4	5.0	4.1	4.1	3.0
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: P881726
 CATALOG NUMBER: NAV-SB1B-735-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7	681.7
2.5°	686.2	681.7	670.5	657.4	640.2	631.9	620.7	613.0	606.5	607.1	601.1
5°	699.5	688.2	663.1	631.6	592.5	564.7	535.1	514.6	498.0	494.5	486.5
7.5°	717.9	700.1	655.9	599.4	533.3	483.2	438.5	409.7	389.3	382.8	376.3
10°	741.6	715.8	646.8	558.8	463.7	400.0	352.0	329.5	315.5	310.8	307.2
12.5°	769.1	733.9	634.6	509.3	392.0	330.6	300.1	288.9	284.4	282.9	282.0
15°	803.8	756.4	616.2	450.6	331.2	288.3	275.2	273.8	274.3	273.8	273.5
17.5°	845.0	781.0	586.3	390.2	290.3	266.6	261.9	263.1	264.6	264.3	263.7
20°	890.0	805.3	548.1	336.6	262.5	251.2	248.6	249.8	250.9	250.3	250.1
22.5°	941.2	831.3	505.7	294.8	243.8	237.0	234.1	234.3	234.3	233.2	232.6
25°	1002.6	860.1	461.3	265.2	229.6	224.3	220.7	219.5	217.8	214.2	213.6
27.5°	1075.8	890.6	418.6	244.4	218.4	213.3	209.2	206.2	201.8	195.8	195.2
30°	1158.1	927.6	382.5	231.4	209.5	204.4	199.7	195.2	188.7	181.3	180.7
32.5°	1255.0	967.3	356.1	222.8	201.5	196.1	190.5	185.2	178.1	170.7	170.9
35°	1370.5	1015.3	340.7	216.9	195.2	188.1	181.9	176.0	170.7	164.1	163.5
37.5°	1495.9	1066.3	336.0	213.9	191.1	180.1	173.0	168.9	168.3	164.4	164.1
40°	1633.0	1126.7	339.5	212.1	186.6	172.4	164.7	163.8	165.3	158.5	158.8
42.5°	1778.2	1198.4	345.5	210.1	180.4	164.7	157.3	157.3	156.1	146.7	146.7
45°	1935.2	1281.1	351.4	205.0	173.0	157.0	151.4	149.3	144.3	135.1	134.8
47.5°	2093.4	1365.2	355.8	195.8	164.1	150.5	145.5	140.7	133.3	125.0	124.7
50°	2243.6	1440.8	351.1	182.2	154.1	144.3	139.0	132.4	124.4	118.8	117.9
52.5°	2377.9	1506.2	330.9	166.2	143.4	137.8	133.0	126.2	119.7	113.8	113.2
55°	2494.6	1559.3	295.4	151.1	133.9	132.1	127.4	118.8	109.9	104.9	104.3
57.5°	2606.6	1599.6	250.9	138.7	125.3	125.9	118.8	111.1	102.8	97.5	96.9
60°	2755.6	1653.5	205.9	127.1	116.1	117.9	110.2	104.6	94.2	87.4	86.5
62.5°	2993.8	1737.3	163.5	112.9	105.5	106.1	102.8	96.0	83.5	75.5	75.0
65°	3182.8	1706.5	128.9	97.5	93.3	94.2	94.2	86.8	73.5	64.3	63.4
67.5°	3161.5	1461.2	102.8	82.4	81.8	82.4	84.4	78.2	65.2	57.8	56.6
70°	2912.3	1162.3	82.4	68.4	71.1	69.6	75.5	71.4	58.7	51.3	50.4
72.5°	2376.4	837.3	62.8	56.6	54.5	56.9	68.1	64.3	48.9	40.6	39.7
75°	1388.6	446.8	46.8	44.7	39.4	47.4	60.4	54.8	37.3	29.9	29.0
77.5°	452.1	155.8	34.4	32.9	29.3	38.2	51.6	46.2	30.5	23.7	22.8
80°	121.2	47.1	23.4	21.6	19.0	28.4	40.9	36.7	21.9	15.4	15.1
82.5°	48.6	19.9	13.6	12.1	10.4	19.6	32.3	29.6	16.3	9.8	9.8
85°	15.7	6.5	5.0	3.9	4.7	12.1	19.3	20.1	11.6	5.0	3.9
87.5°	2.1	0.9	0.9	1.2	0.9	2.1	5.9	5.6	3.3	0.6	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)