

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: P964182

Luminaire Tested: **NAV-SB3B-830-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15826 lumens
Efficiency: N/A
Efficacy: 144.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 109.2
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

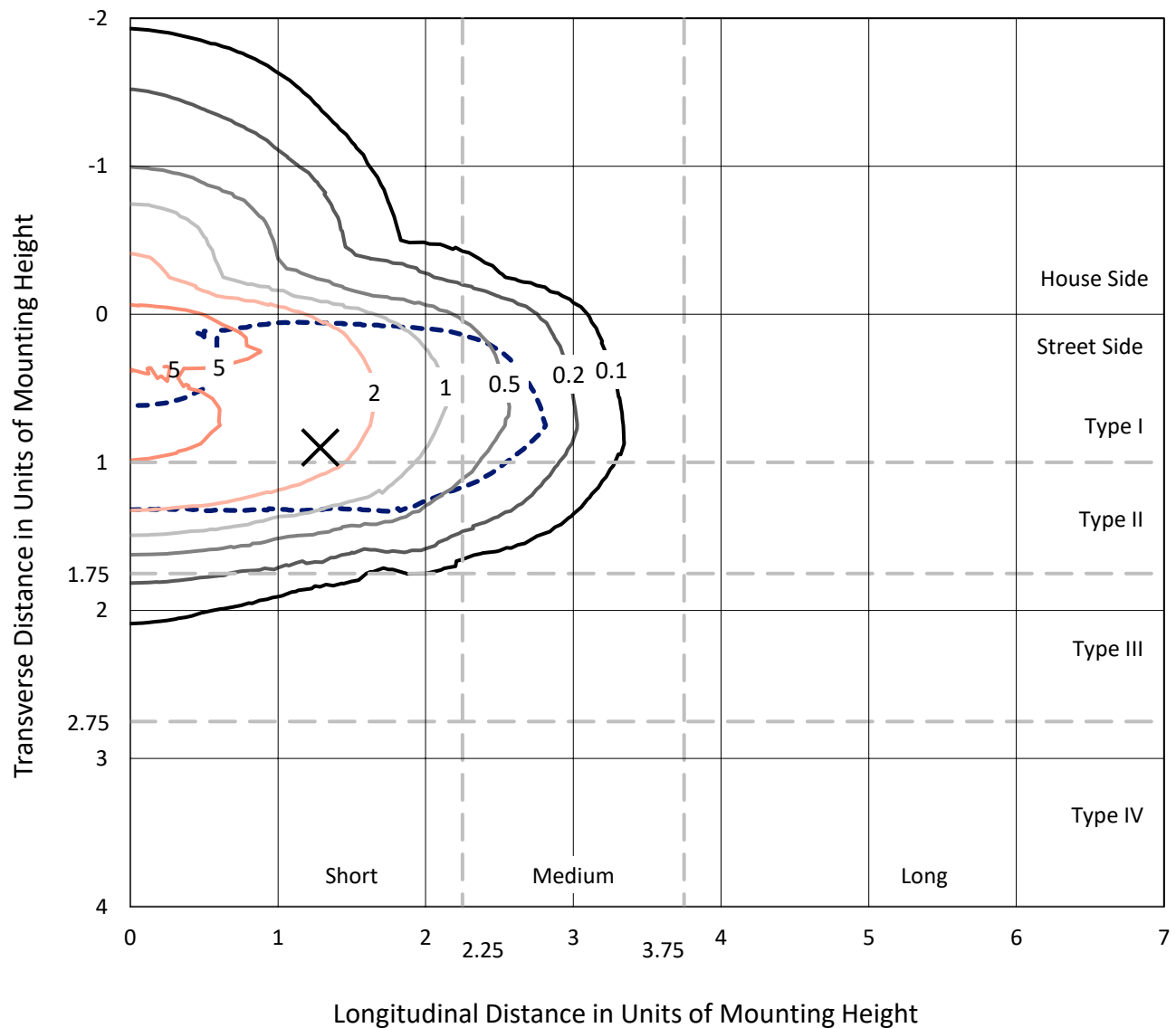


REPORT NUMBER: P964182

CATALOG NUMBER: NAV-SB3B-830-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

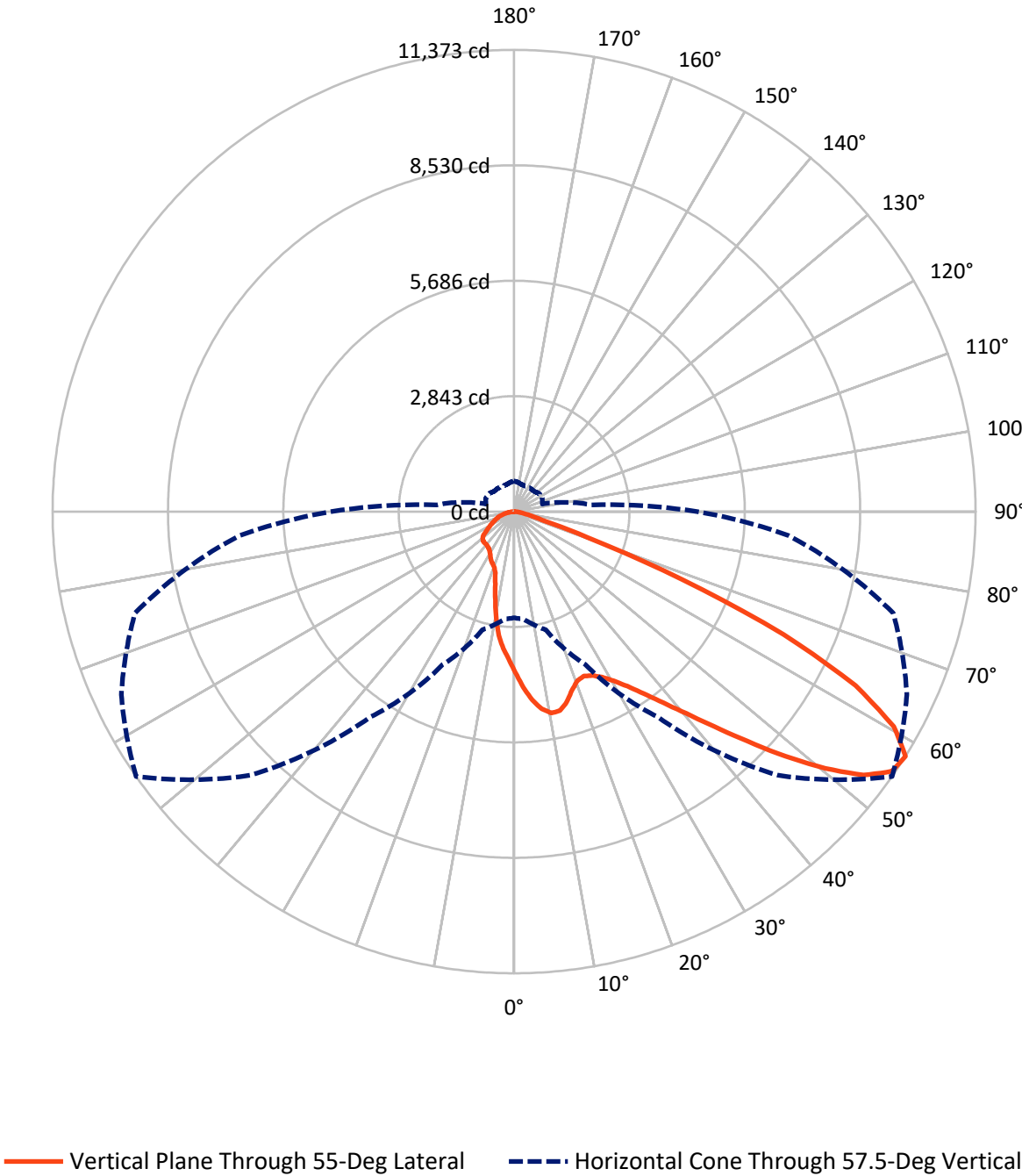


Based on 25 foot mounting height. Maximum calculated value = 7.7 fc

Type II - Short - N/A

REPORT NUMBER: P964182
CATALOG NUMBER: NAV-SB3B-830-U-AFL

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2863.6	0.0	2863.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	12962.4	0.0	12962.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	15826.0	0.0	15826.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.0	2.3
10°-20°	928.8	5.9
20°-30°	1482.1	9.4
30°-40°	2346.5	14.8
40°-50°	3591.5	22.7
50°-60°	3846.9	24.3
60°-70°	2420.1	15.3
70°-80°	715.7	4.5
80°-90°	126.5	0.8
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°	15826.0	100.0
0°-180°	15826.0	100.0

Coefficient of Utilization



REPORT NUMBER: P964182

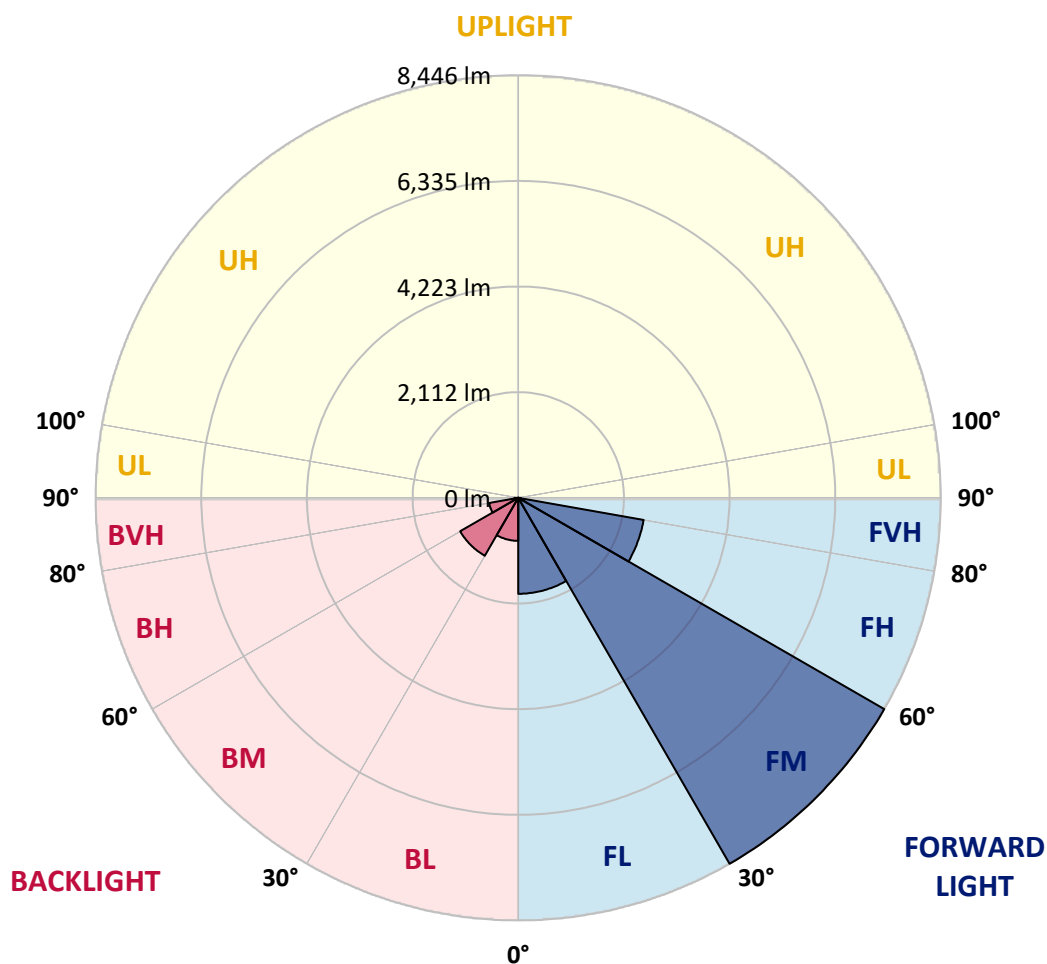
CATALOG NUMBER: NAV-SB3B-830-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1918.1	12.1			
FM	(30°-60°)	8446.4	53.4			
FH	(60°-80°)	2544.3	16.1			G2/5000
FVH	(80°-90°)	53.5	0.3			G1/100
BL	(0°-30°)	860.7	5.4	B2/1000		
BM	(30°-60°)	1338.4	8.5	B2/2500		
BH	(60°-80°)	591.4	3.7	B2/1000		G2/1000
BVH	(80°-90°)	73.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



REPORT NUMBER: P964182

CATALOG NUMBER: NAV-SB3B-830-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5
2.5°	4549.7	4546.4	4564.3	4503.0	4461.3	4404.8	4330.3	4235.5	4133.2	4025.2	3978.5
5°	4959.5	4930.9	4949.7	4903.9	4858.1	4773.0	4662.5	4508.0	4318.9	4103.8	3989.2
7.5°	4894.9	4875.2	4923.5	4964.4	4998.8	4988.2	4907.2	4745.1	4501.4	4188.9	4022.7
10°	4373.8	4351.6	4419.6	4561.0	4768.9	4949.7	5047.9	4947.3	4687.9	4282.1	4055.5
12.5°	3914.0	3903.3	3948.3	4062.8	4293.5	4640.5	5029.9	5124.0	4881.8	4392.5	4099.7
15°	3717.6	3704.5	3733.2	3791.3	3938.5	4261.6	4866.3	5245.0	5072.4	4520.1	4170.0
17.5°	3674.2	3659.5	3671.8	3702.0	3796.9	4043.2	4619.2	5304.8	5271.3	4662.5	4228.9
20°	3754.4	3742.2	3743.8	3742.2	3808.4	4004.0	4447.4	5281.8	5444.7	4793.4	4286.1
22.5°	3948.3	3927.8	3928.6	3885.3	3921.3	4072.6	4402.4	5220.5	5599.3	4908.0	4329.6
25°	4264.1	4227.3	4234.7	4124.2	4114.3	4226.5	4472.7	5173.1	5753.1	4999.6	4337.7
27.5°	4696.0	4654.3	4632.3	4467.8	4389.3	4444.9	4615.9	5189.4	5898.8	5079.0	4317.3
30°	5236.0	5185.3	5140.3	4907.2	4764.8	4744.3	4838.4	5297.4	6070.6	5162.4	4282.1
32.5°	5898.0	5839.0	5757.2	5448.0	5247.5	5140.3	5126.4	5489.7	6271.8	5268.8	4264.1
35°	6685.8	6608.9	6492.7	6092.6	5839.0	5619.8	5506.0	5767.0	6547.5	5429.1	4284.6
37.5°	7497.4	7410.6	7304.3	6828.1	6516.4	6193.3	5969.1	6143.3	6914.9	5646.7	4338.5
40°	8245.9	8148.5	8049.6	7625.8	7291.2	6901.7	6536.0	6619.4	7364.0	5906.9	4430.2
42.5°	8687.7	8615.7	8578.1	8349.0	8090.5	7695.4	7241.3	7184.0	7868.8	6206.4	4534.9
45°	8668.1	8638.6	8754.8	8849.7	8788.3	8569.1	8067.6	7808.2	8375.2	6465.7	4631.5
47.5°	8205.0	8224.7	8484.0	9017.4	9252.3	9366.8	9008.4	8421.0	8815.4	6659.6	4674.8
50°	6945.1	6961.5	7561.9	8712.3	9371.7	10017.2	9941.9	9019.1	9156.5	6778.2	4665.0
52.5°	5947.8	5958.4	6216.1	7807.4	8977.4	10344.4	10783.0	9582.7	9406.0	6810.9	4610.1
55°	4480.1	4516.9	4805.7	6125.3	7951.4	10085.1	11295.1	10163.7	9564.0	6814.2	4552.9
57.5°	2617.2	2657.3	3014.0	4157.7	6180.1	9181.0	11372.9	10679.1	9671.1	6788.1	4518.5
60°	1282.0	1299.2	1454.7	2185.2	3810.8	7439.2	10747.7	10928.6	9730.8	6774.1	4516.9
62.5°	864.0	861.5	868.1	1078.3	1877.6	4779.5	9445.4	10491.7	9699.0	6720.9	4500.6
65°	742.8	733.9	709.3	756.8	972.7	2186.0	7297.7	9187.6	9455.9	6587.6	4388.4
67.5°	642.3	643.1	643.9	629.1	694.6	1008.8	4459.7	7237.2	8583.9	5956.0	3956.5
70°	531.8	539.2	542.4	542.4	566.1	661.8	1903.8	4960.3	6770.8	4669.9	3186.6
72.5°	484.3	468.8	470.5	462.3	462.3	504.0	766.6	2811.9	4265.7	2627.0	1944.7
75°	395.1	405.0	406.6	400.9	382.0	384.5	454.9	1179.8	1825.2	1089.8	961.3
77.5°	341.1	341.1	344.4	340.3	325.6	288.0	303.5	457.4	620.9	446.7	480.2
80°	274.1	273.3	287.2	295.3	272.4	212.7	193.9	252.8	275.7	196.4	249.5
82.5°	133.4	141.6	197.2	225.0	206.9	153.9	118.6	157.0	147.3	86.7	112.1
85°	77.7	73.6	88.4	125.2	118.6	85.1	57.3	81.8	76.9	44.2	45.0
87.5°	24.5	22.9	18.0	42.5	34.3	23.7	15.6	23.7	21.3	9.8	9.8
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: P964182

CATALOG NUMBER: NAV-SB3B-830-U-AFL

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5	3965.5
2.5°	3920.5	3824.0	3728.2	3640.7	3587.5	3553.2	3518.8	3480.3	3465.6	3443.5
5°	3881.3	3694.7	3528.6	3385.5	3255.3	3153.1	3050.0	2966.6	2928.9	2954.3
7.5°	3858.3	3588.3	3332.3	3069.7	2816.8	2614.8	2438.9	2315.3	2259.7	2273.6
10°	3837.8	3468.1	3077.8	2663.1	2299.8	2049.4	1869.4	1775.3	1740.1	1747.5
12.5°	3819.0	3333.1	2771.0	2225.3	1839.2	1673.9	1622.4	1623.2	1629.7	1634.7
15°	3815.8	3170.2	2428.2	1842.4	1590.5	1579.8	1635.5	1670.6	1689.4	1695.1
17.5°	3810.8	2975.6	2078.9	1581.5	1529.9	1601.9	1653.4	1676.4	1691.0	1691.9
20°	3791.3	2728.4	1756.5	1457.1	1516.8	1579.0	1610.9	1628.9	1641.1	1645.2
22.5°	3730.7	2453.5	1505.3	1401.5	1464.4	1514.3	1552.0	1572.5	1579.8	1584.8
25°	3621.8	2145.9	1331.9	1348.3	1391.6	1454.7	1484.9	1489.0	1486.6	1493.9
27.5°	3479.5	1816.3	1224.0	1276.3	1331.9	1385.9	1402.3	1399.8	1394.9	1403.1
30°	3307.7	1520.1	1155.2	1195.3	1271.4	1320.5	1335.2	1329.4	1319.7	1328.6
32.5°	3126.0	1278.0	1098.8	1138.9	1221.5	1269.8	1284.4	1278.8	1271.4	1278.8
35°	2956.7	1108.5	1046.4	1101.2	1182.2	1229.7	1248.4	1249.3	1249.3	1258.3
37.5°	2801.3	1009.6	1003.1	1077.5	1155.2	1197.7	1224.8	1226.4	1191.2	1193.6
40°	2657.3	967.8	983.4	1061.9	1129.0	1169.9	1171.6	1079.9	1015.3	1013.6
42.5°	2539.4	959.7	989.1	1060.3	1110.2	1111.8	996.5	925.3	907.3	908.2
45°	2429.0	957.2	1002.2	1060.3	1082.4	960.5	882.7	864.0	865.6	872.2
47.5°	2305.5	947.4	1004.7	1045.6	1002.2	854.1	831.2	823.1	819.8	821.4
50°	2170.5	912.2	973.5	1016.1	864.8	808.3	779.7	777.3	781.4	783.8
52.5°	2028.2	855.0	920.3	963.0	801.8	768.2	736.4	742.0	760.0	765.8
55°	1934.9	787.8	850.0	856.6	757.6	730.6	703.6	716.7	750.2	760.9
57.5°	1910.3	716.7	769.9	762.5	701.1	697.8	681.5	693.0	735.5	751.0
60°	1903.0	652.8	691.4	685.6	646.4	661.8	657.7	663.5	678.2	683.2
62.5°	1845.7	602.2	620.9	612.7	597.3	624.2	634.1	621.8	633.2	639.0
65°	1700.1	561.2	552.3	546.5	553.1	577.6	597.3	572.7	583.3	599.7
67.5°	1459.5	505.6	481.0	487.6	508.1	521.1	546.5	518.6	527.7	555.6
70°	1180.6	435.2	413.2	431.9	451.6	478.6	482.7	463.9	485.1	516.2
72.5°	835.3	364.1	348.5	386.9	393.5	428.7	419.7	410.7	440.1	450.8
75°	579.2	293.7	284.7	314.2	337.8	368.2	361.6	372.3	434.4	439.3
77.5°	366.5	228.3	222.5	241.4	274.1	307.6	318.3	439.3	742.0	771.5
80°	212.7	170.1	163.6	178.4	206.9	238.1	306.8	539.2	489.2	483.5
82.5°	118.6	117.0	108.9	112.9	138.3	171.8	433.6	379.7	308.4	318.3
85°	55.7	68.7	58.9	56.5	77.7	201.3	289.7	216.8	144.0	140.7
87.5°	14.8	13.1	13.1	14.8	32.7	173.4	115.3	92.5	54.8	53.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)