

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: P965622

Luminaire Tested: **NAV-SB4A-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965622
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15602.6 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 114
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

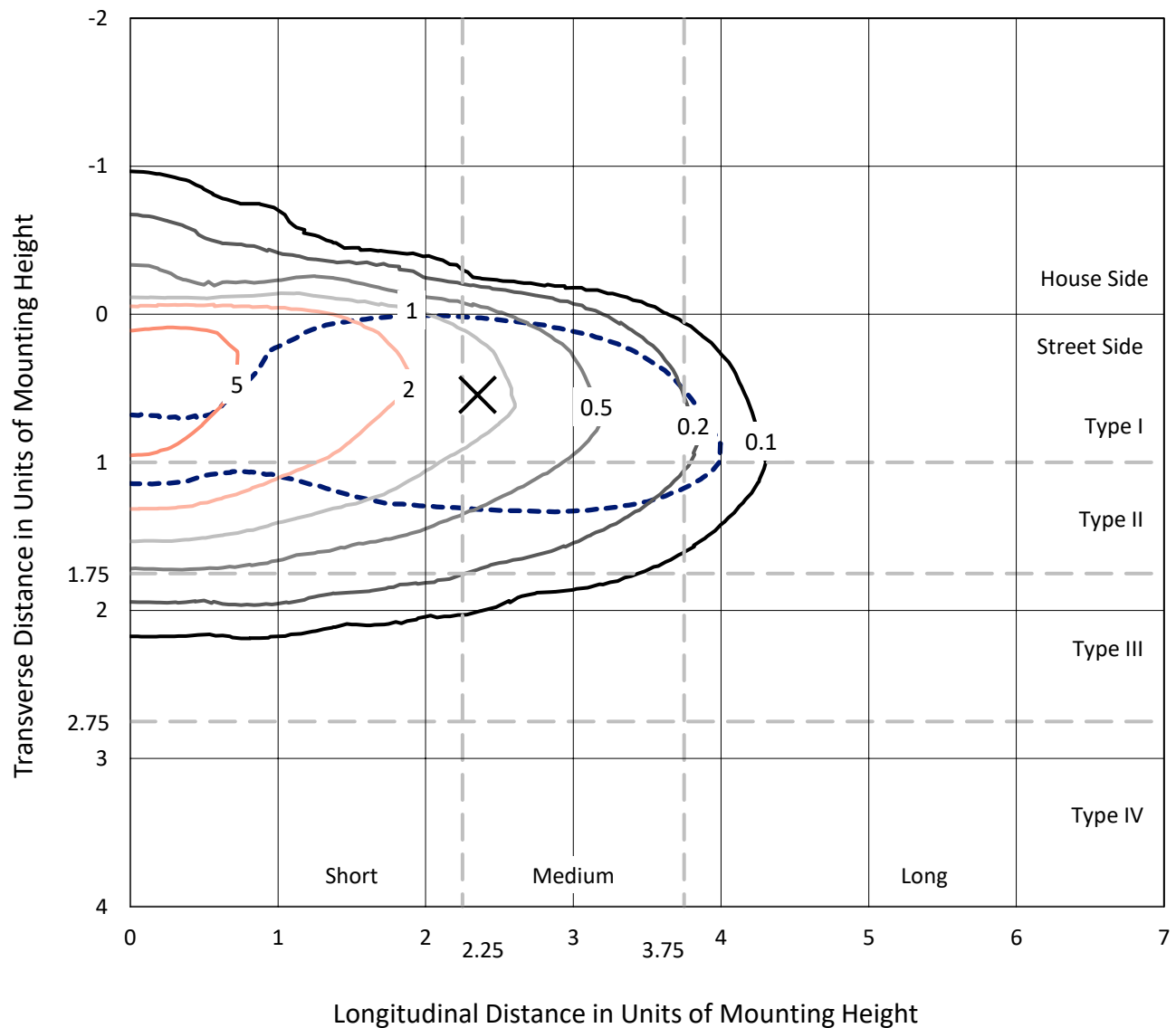


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Iso-Footcandle Lines of Horizontal Illumination

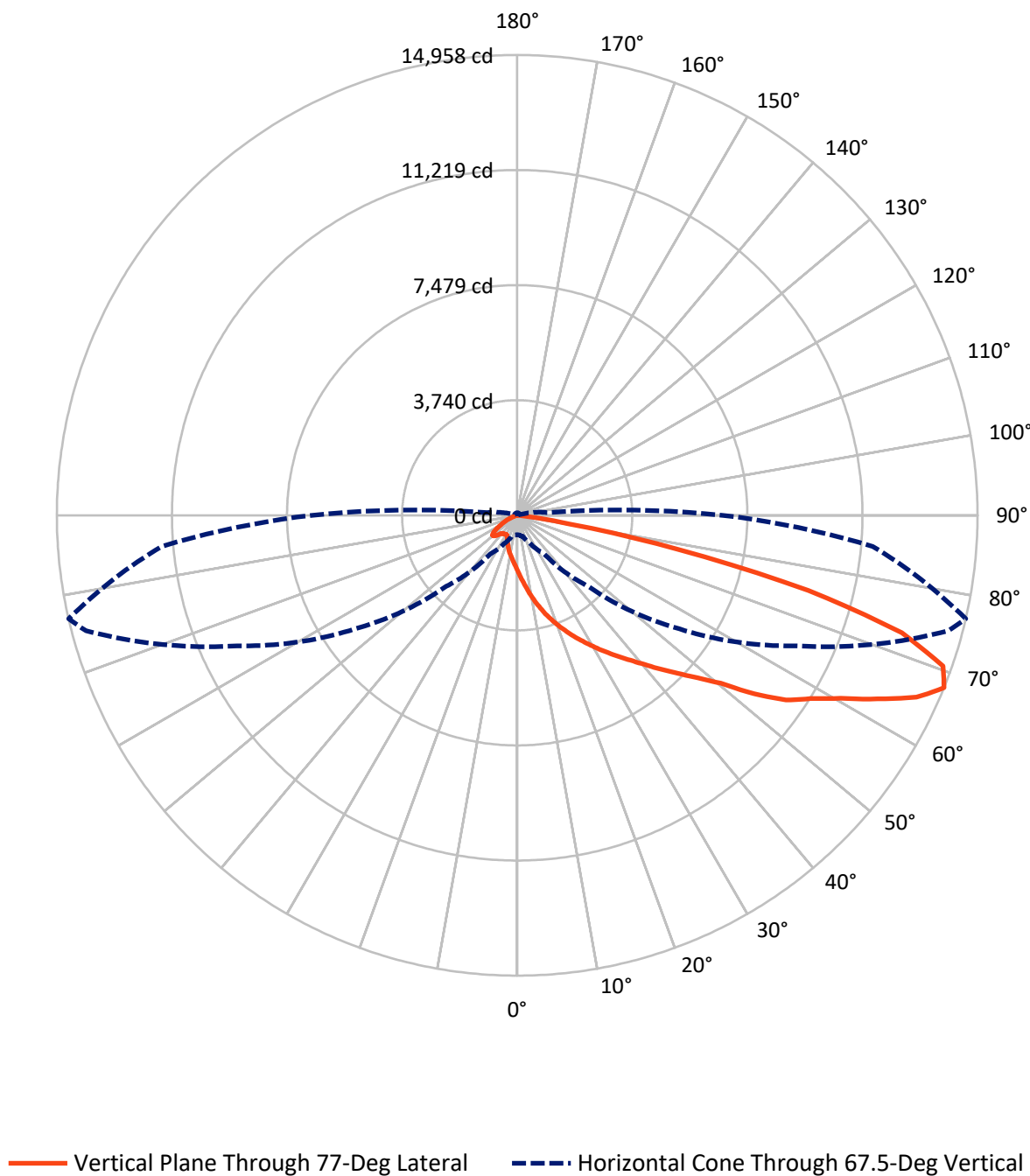
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1147.9	0.0	1147.9
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	14454.7	0.0	14454.7
	% Fixture	92.6	0.0	92.6
Total	Lumens	15602.6	0.0	15602.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.6	1.2
10°-20°	643.1	4.1
20°-30°	1241.0	8.0
30°-40°	2154.4	13.8
40°-50°	3128.1	20.0
50°-60°	3592.2	23.0
60°-70°	3118.7	20.0
70°-80°	1468.9	9.4
80°-90°	72.6	0.5
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°	15602.6	100.0
0°-180°	15602.6	100.0

Coefficient of Utilization



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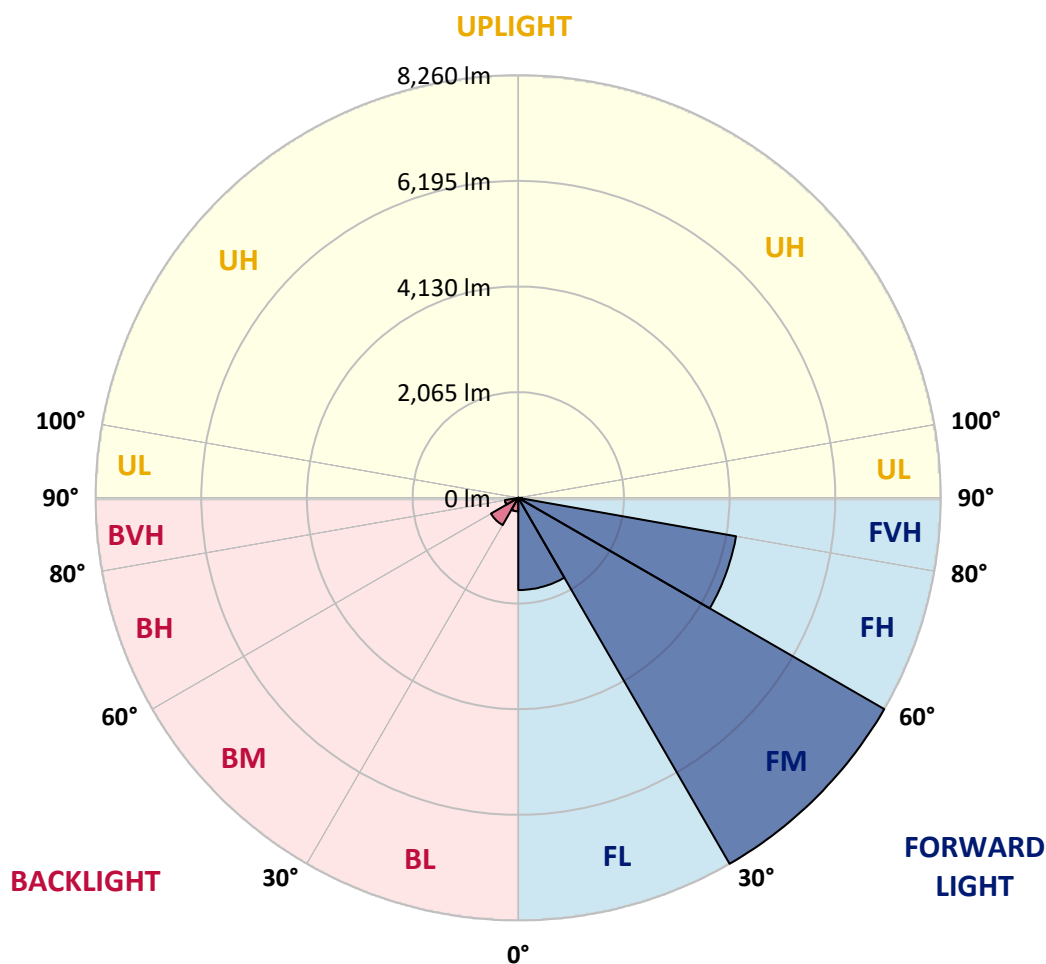
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1801.9	11.5			
FM	(30°-60°)	8259.6	52.9			
FH	(60°-80°)	4321.9	27.7			G2/5000
FVH	(80°-90°)	71.3	0.5			G1/100
BL	(0°-30°)	265.8	1.7	B1/500		
BM	(30°-60°)	615.1	3.9	B1/1000		
BH	(60°-80°)	265.7	1.7	B1/500		G1/500
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2
2.5°	2491.0	2506.4	2484.2	2441.5	2377.6	2336.0	2234.2	2138.4	2031.8	1997.8	1891.2
5°	3036.5	3050.0	3024.9	2978.3	2893.1	2811.7	2678.0	2477.4	2269.1	2202.2	2013.3
7.5°	3440.5	3448.2	3438.6	3395.9	3314.5	3222.5	3073.3	2835.9	2526.8	2453.2	2163.5
10°	3731.1	3756.3	3753.4	3736.9	3682.7	3608.1	3449.2	3178.8	2815.6	2720.6	2333.1
12.5°	3923.9	3952.1	3968.5	4005.3	4002.4	3955.0	3815.5	3529.6	3103.3	2991.9	2524.0
15°	3980.2	4010.2	4073.1	4158.4	4234.0	4258.3	4160.4	3873.6	3420.1	3277.7	2719.6
17.5°	3948.2	3994.6	4070.3	4205.0	4370.6	4480.1	4469.4	4205.9	3707.9	3545.2	2911.5
20°	4018.9	4063.5	4122.5	4235.9	4428.7	4627.4	4706.8	4523.6	3993.7	3823.1	3113.0
22.5°	4410.4	4402.6	4408.4	4426.8	4542.1	4738.8	4902.5	4812.4	4276.6	4102.3	3326.1
25°	5030.4	4995.5	4936.4	4836.7	4807.6	4902.5	5073.0	5068.2	4575.0	4388.0	3544.1
27.5°	5741.5	5735.8	5597.2	5357.0	5221.2	5184.4	5265.8	5317.2	4870.5	4670.9	3763.1
30°	6422.6	6438.2	6251.2	5983.7	5734.8	5590.5	5516.8	5553.6	5170.9	4976.2	3988.9
32.5°	7015.6	7032.1	6828.7	6515.7	6207.6	6033.2	5878.2	5787.0	5498.4	5286.2	4236.9
35°	7516.5	7533.0	7299.5	6953.6	6625.2	6467.2	6291.9	6042.9	5827.7	5630.1	4513.1
37.5°	7964.1	7959.3	7646.4	7297.6	6974.9	6850.0	6757.9	6357.8	6166.9	5976.1	4819.1
40°	8228.7	8249.0	7981.6	7597.0	7284.1	7192.9	7187.1	6748.2	6558.4	6373.2	5154.4
42.5°	8306.2	8342.1	8148.2	7832.4	7548.5	7449.7	7601.8	7170.7	7013.7	6833.5	5533.3
45°	8166.7	8201.5	8113.4	7894.4	7728.7	7664.7	7958.3	7608.6	7500.0	7321.8	5960.5
47.5°	7759.8	7803.3	7824.6	7778.1	7776.2	7841.1	8278.1	8069.7	8077.5	7895.4	6455.7
50°	6972.0	7045.6	7241.4	7406.1	7661.0	7980.6	8589.1	8569.7	8728.6	8571.7	7100.9
52.5°	5540.0	5644.7	6319.0	6769.5	7342.2	7954.5	8931.1	9372.0	9871.0	9641.3	8010.7
55°	4452.0	4452.0	5000.4	5843.3	6720.1	7782.0	9080.3	9893.2	10648.9	10594.7	8651.1
57.5°	3629.4	3673.0	4022.8	4767.9	5820.1	7371.2	9172.3	10220.7	11275.8	11236.0	9277.0
60°	2240.0	2334.0	2994.8	3730.2	4796.0	6639.7	9114.2	10552.1	12036.4	12068.3	10030.8
62.5°	1261.5	1296.3	1590.9	2683.8	3729.2	5656.3	8669.6	10737.1	13009.1	13144.7	10807.8
65°	871.0	888.5	1001.8	1670.3	2584.9	4503.3	7800.5	10621.8	13983.8	14258.0	11466.7
67.5°	632.6	641.4	712.2	1020.2	1533.7	3265.1	6438.2	10040.5	14500.2	14958.4	11592.6
70°	486.4	492.2	543.6	670.5	905.9	2015.3	4675.8	8884.6	14126.2	14673.6	10947.3
72.5°	395.3	401.1	440.9	496.1	600.8	1191.8	2833.9	7215.2	12475.3	13066.3	9319.6
75°	333.3	341.0	376.9	412.8	470.9	765.4	1329.3	5024.5	9381.6	9769.2	6480.8
77.5°	185.0	170.6	306.2	342.0	397.3	484.4	622.0	2957.0	5254.3	5361.8	2875.6
80°	115.3	119.2	243.2	275.1	305.2	244.2	284.8	1138.5	1821.5	1730.4	557.1
82.5°	6.8	15.5	187.0	198.6	209.3	104.7	107.5	386.6	438.9	403.0	98.8
85°	0.0	0.0	85.3	68.8	72.7	30.0	31.0	90.1	59.1	64.0	19.4
87.5°	0.0	0.0	0.0	1.9	0.0	2.9	5.8	7.8	2.9	3.9	6.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2	1799.2
2.5°	1823.5	1755.6	1618.1	1483.4	1373.9	1272.1	1199.5	1130.7	1095.8	1093.9	1091.9
5°	1878.6	1736.2	1461.0	1217.9	1022.1	865.2	763.5	690.8	653.9	641.4	639.5
7.5°	1956.2	1742.1	1323.5	985.3	754.7	620.1	561.9	538.7	530.9	522.2	520.3
10°	2054.0	1755.6	1200.5	793.6	594.9	527.1	503.8	494.2	488.3	482.5	480.5
12.5°	2163.5	1768.2	1078.4	658.9	523.2	488.3	471.8	460.2	452.4	445.7	443.7
15°	2270.1	1775.9	951.4	564.9	486.4	458.3	440.9	428.2	417.6	409.8	408.9
17.5°	2375.6	1786.6	832.3	508.7	456.3	428.2	410.8	395.3	386.6	377.8	376.9
20°	2492.9	1784.6	719.9	468.9	426.3	398.2	379.8	365.3	356.6	346.9	345.9
22.5°	2601.4	1775.0	621.0	435.0	395.3	368.2	347.8	333.3	324.6	316.8	315.8
25°	2726.4	1767.2	538.7	404.1	366.2	339.1	316.8	303.3	293.6	286.8	285.8
27.5°	2846.5	1755.6	478.7	376.0	338.1	312.0	290.7	275.1	266.4	261.6	261.6
30°	2964.8	1752.6	456.3	348.8	312.9	286.8	265.5	250.9	244.2	242.2	241.3
32.5°	3107.2	1760.4	466.1	339.1	289.7	263.5	243.2	232.6	225.7	225.7	225.7
35°	3259.3	1758.5	480.5	347.8	274.2	240.3	224.8	218.0	211.3	211.3	211.3
37.5°	3450.2	1761.5	492.2	362.3	268.3	220.9	212.2	203.5	199.6	199.6	199.6
40°	3735.0	1857.3	486.4	374.9	266.4	207.4	189.9	187.0	184.1	184.1	184.1
42.5°	4083.8	2065.7	494.2	376.0	265.5	197.6	174.4	180.2	173.4	172.5	171.5
45°	4465.5	2293.3	543.6	355.6	264.6	192.8	166.7	173.4	162.8	162.8	162.8
47.5°	4844.4	2519.0	593.9	326.5	261.6	191.9	159.9	156.0	153.0	154.1	154.1
50°	5366.6	2703.1	613.3	286.8	254.8	189.9	147.3	148.2	146.3	148.2	148.2
52.5°	5935.4	2741.9	590.1	242.2	235.4	184.1	138.6	142.5	141.4	143.4	143.4
55°	6289.9	2700.3	487.4	201.5	205.4	160.8	129.9	137.6	137.6	137.6	137.6
57.5°	6656.1	2522.9	345.9	163.7	170.6	131.8	122.1	132.7	131.8	130.8	130.8
60°	6919.7	2236.1	227.7	134.7	135.6	108.5	113.4	124.9	124.0	119.2	119.2
62.5°	7116.4	1919.3	146.3	114.3	103.6	97.9	103.6	113.4	109.5	98.8	96.9
65°	7094.1	1480.4	112.3	97.9	85.3	85.3	90.1	98.8	87.2	69.8	67.9
67.5°	6680.4	1001.8	93.0	82.3	71.6	70.7	74.6	82.3	74.6	59.1	57.2
70°	5941.1	655.0	74.6	64.0	57.2	52.3	60.1	70.7	62.9	47.5	45.5
72.5°	4822.1	399.1	56.2	46.5	41.6	33.9	47.5	58.1	50.4	34.8	32.9
75°	3119.8	203.5	38.7	30.0	22.2	20.4	34.8	43.6	34.8	21.3	18.4
77.5°	1193.6	85.3	21.3	13.5	11.6	9.7	19.4	26.1	14.6	4.8	3.9
80°	229.6	35.9	10.7	6.8	5.8	3.9	2.9	1.9	0.0	0.0	0.0
82.5°	39.8	11.6	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	0.0	0.0	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	0.0

(END OF REPORT)