

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: P962476

Luminaire Tested: **NAV-SB2C-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962476
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-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 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: 13847.7 lumens
Efficiency: N/A
Efficacy: 137.2 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

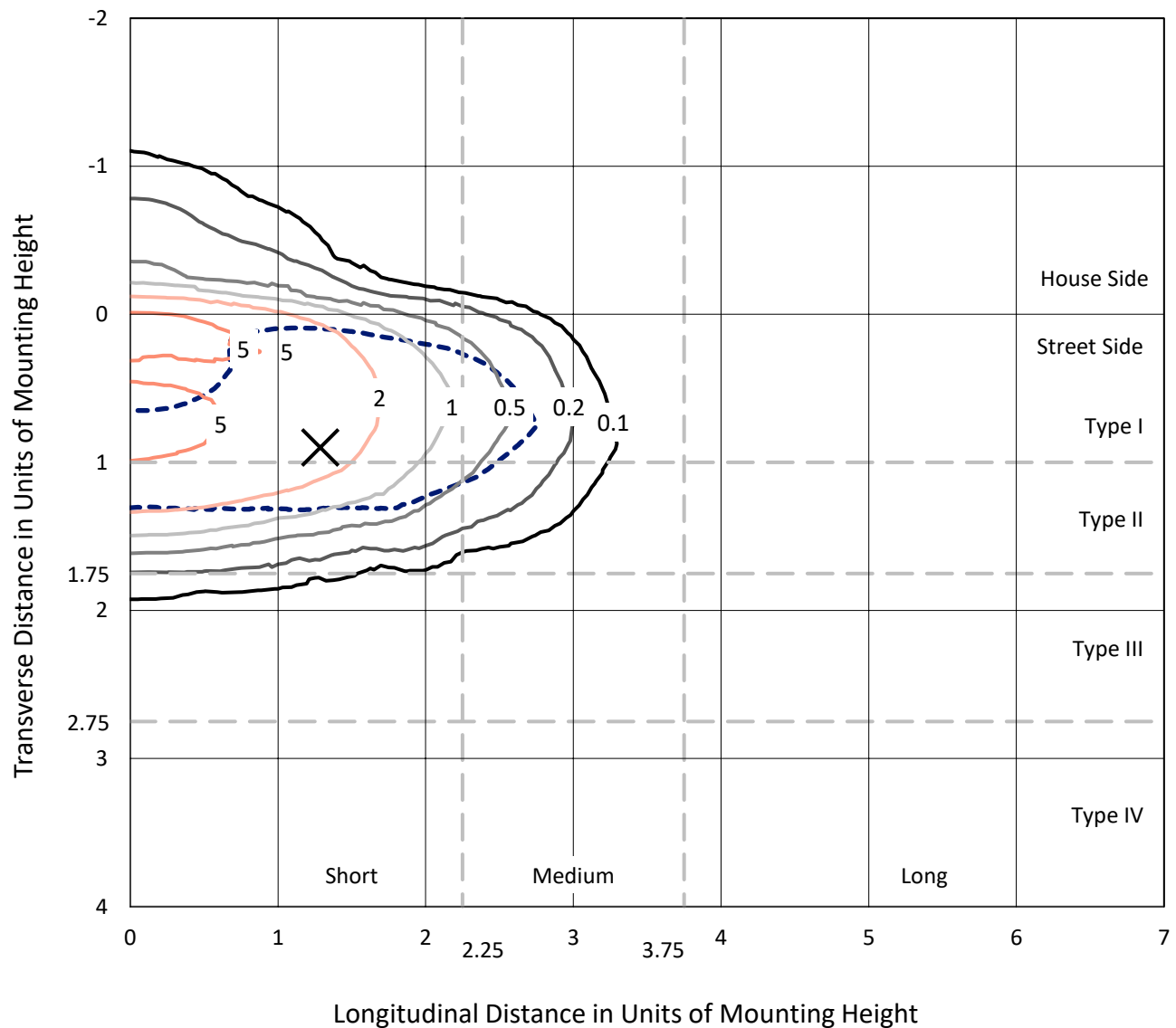


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

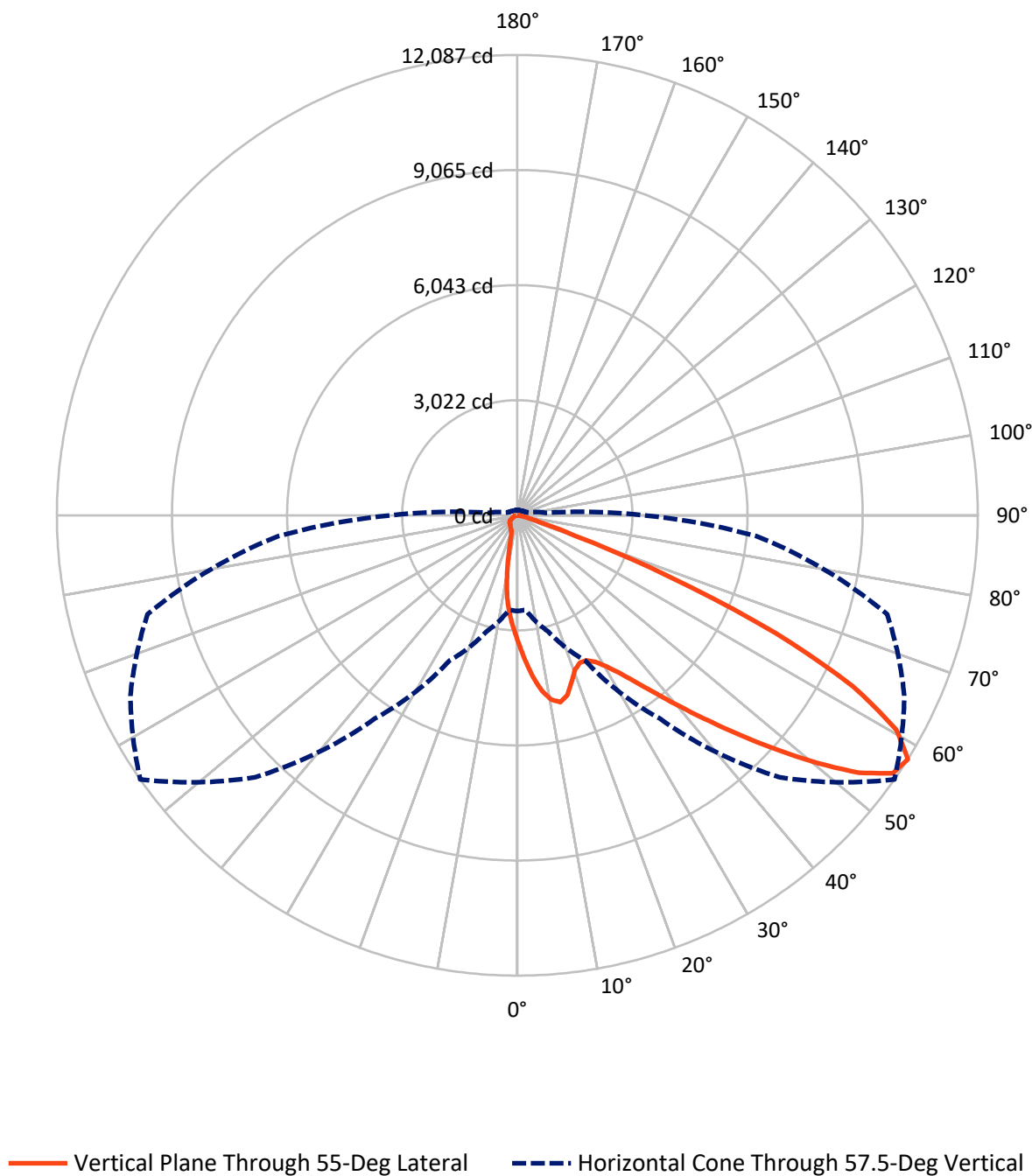


Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1081.4	0.0	1081.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	12766.3	0.0	12766.3
	% Fixture	92.2	0.0	92.2
Total	Lumens	13847.7	0.0	13847.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.5	2.2
10°-20°	750.0	5.4
20°-30°	1200.0	8.7
30°-40°	2031.0	14.7
40°-50°	3334.5	24.1
50°-60°	3664.8	26.5
60°-70°	2102.1	15.2
70°-80°	429.5	3.1
80°-90°	25.3	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°	13847.7	100.0
0°-180°	13847.7	100.0

Coefficient of Utilization



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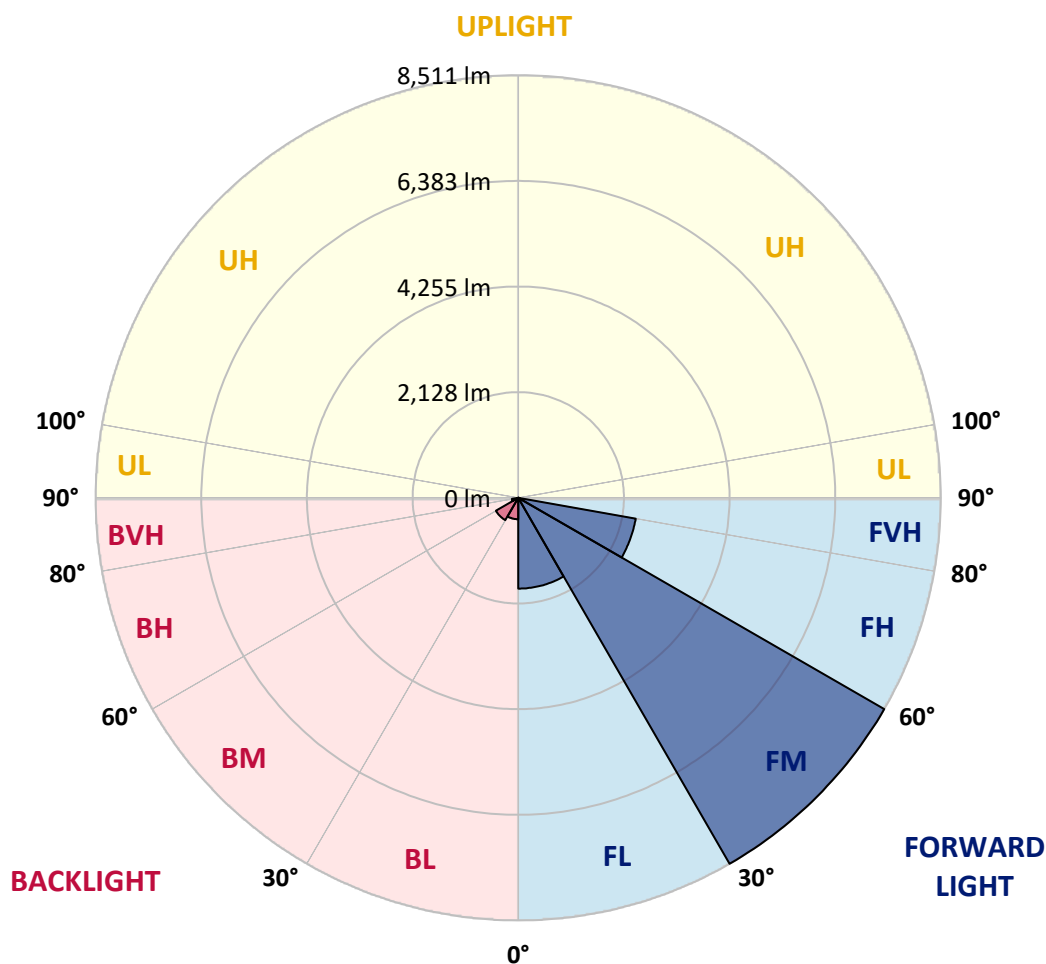
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1828.7	13.2			
FM	(30°-60°)	8510.9	61.5			
FH	(60°-80°)	2403.1	17.4			G2/5000
FVH	(80°-90°)	23.6	0.2			G1/100
BL	(0°-30°)	431.7	3.1	B1/500		
BM	(30°-60°)	519.4	3.8	B1/1000		
BH	(60°-80°)	128.6	0.9	B1/500		G1/500
BVH	(80°-90°)	1.7	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0
2.5°	4140.5	4088.4	4080.7	4070.5	3971.4	3897.2	3789.5	3671.7	3539.3	3404.4	3344.7
5°	4783.5	4742.5	4734.8	4686.9	4574.3	4447.9	4256.6	4014.9	3768.2	3477.8	3353.2
7.5°	4908.1	4900.4	4935.5	4933.7	4918.4	4818.4	4657.1	4369.3	3998.7	3568.3	3375.4
10°	4352.3	4371.8	4476.1	4567.4	4814.2	4957.6	4922.7	4685.3	4236.1	3671.7	3400.1
12.5°	3845.9	3822.8	3897.2	4000.5	4287.4	4714.3	5032.8	4949.1	4507.6	3788.7	3436.8
15°	3528.3	3518.8	3560.6	3608.5	3827.1	4257.4	4904.7	5163.4	4768.9	3927.0	3492.4
17.5°	3426.6	3419.0	3431.7	3443.7	3585.4	3918.5	4599.9	5294.9	5019.1	4084.9	3553.9
20°	3509.5	3499.2	3497.5	3488.1	3547.0	3774.2	4324.1	5304.3	5243.7	4228.4	3606.8
22.5°	3751.1	3739.1	3697.3	3659.8	3664.9	3793.8	4201.1	5210.4	5412.7	4362.5	3640.1
25°	4189.2	4169.5	4082.4	3956.0	3875.7	3930.4	4219.9	5086.6	5574.2	4467.5	3623.9
27.5°	4737.3	4711.7	4599.9	4412.0	4228.4	4161.8	4355.6	5001.2	5708.2	4547.7	3588.8
30°	5274.4	5241.1	5130.9	4985.0	4716.8	4506.8	4600.7	5038.8	5867.9	4631.5	3542.7
32.5°	5854.2	5822.6	5676.6	5495.5	5273.5	4990.9	4936.3	5222.4	6063.4	4748.4	3510.3
35°	6587.7	6538.2	6330.7	6083.9	5848.2	5562.2	5390.6	5539.1	6323.8	4926.9	3528.3
37.5°	7422.7	7356.2	7132.5	6791.8	6484.4	6164.1	5943.9	5974.6	6705.6	5166.0	3583.7
40°	8210.0	8149.5	7942.8	7621.7	7235.8	6847.3	6612.5	6544.1	7232.4	5457.2	3681.1
42.5°	8682.3	8627.6	8540.5	8404.8	8079.5	7683.2	7387.0	7239.2	7855.7	5805.5	3799.8
45°	8708.7	8660.9	8777.9	8935.8	8871.8	8607.9	8246.7	7976.1	8481.6	6132.6	3922.8
47.5°	8285.2	8252.8	8607.9	9159.6	9434.5	9545.5	9212.5	8651.5	8998.2	6367.4	3973.1
50°	7130.7	7118.8	7849.8	8862.5	9648.8	10367.0	10231.2	9279.9	9398.6	6488.7	3925.3
52.5°	6182.9	6139.4	6565.5	7911.3	9337.2	10799.0	11226.8	9896.5	9678.8	6511.7	3813.4
55°	4689.5	4651.0	5185.6	6319.5	8332.1	10645.3	11955.2	10532.6	9879.4	6452.8	3612.8
57.5°	2515.6	2491.7	3167.0	4206.2	6513.4	9723.2	12086.7	11205.5	10048.5	6296.5	3331.9
60°	979.4	975.1	1227.8	2040.8	3958.6	7910.3	11423.2	11609.4	10154.4	6104.4	3097.0
62.5°	592.6	605.4	646.4	916.2	1748.8	4914.1	9893.9	11149.9	10225.2	5928.5	2903.2
65°	490.2	491.0	496.1	629.3	837.6	2056.1	7448.4	9638.6	10050.2	5615.2	2628.2
67.5°	420.1	427.8	447.4	499.5	590.9	901.7	4288.2	7466.3	8985.4	4885.9	2199.5
70°	331.3	341.5	366.3	410.7	456.0	564.4	1584.8	4967.9	6864.3	3682.8	1663.4
72.5°	279.2	278.4	291.2	333.8	362.0	397.1	609.7	2783.7	3989.3	1758.2	823.2
75°	216.1	224.6	240.8	279.2	296.3	287.7	330.5	1017.0	1429.4	532.8	280.0
77.5°	169.0	175.9	190.4	228.0	245.1	204.1	190.4	363.8	459.4	191.3	126.4
80°	76.0	82.0	129.8	168.2	199.8	140.9	103.3	186.1	204.1	87.1	64.1
82.5°	13.6	23.1	76.0	88.8	102.5	91.3	53.8	96.5	99.9	35.1	22.2
85°	0.8	1.7	26.4	32.5	41.0	29.9	16.2	38.4	33.3	12.0	8.5
87.5°	0.0	0.0	0.0	0.8	0.8	4.3	5.1	6.9	5.1	4.3	3.4
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0	3337.0
2.5°	3283.2	3161.9	3044.0	2947.6	2891.2	2795.6	2732.4	2722.2	2695.7	2718.7
5°	3219.9	3003.1	2783.7	2587.3	2425.9	2217.5	2062.1	1996.4	1939.2	1958.8
7.5°	3190.1	2847.7	2506.1	2170.5	1825.6	1492.6	1245.0	1141.6	1063.1	1074.2
10°	3149.9	2686.3	2151.0	1638.6	1176.6	847.9	677.1	614.0	578.9	579.7
12.5°	3119.2	2493.3	1738.5	1110.9	716.4	541.4	488.4	473.0	462.8	463.6
15°	3103.9	2266.2	1331.2	740.4	512.3	458.6	445.8	438.9	432.0	431.2
17.5°	3078.3	2013.4	974.3	540.5	448.3	429.5	418.4	410.7	402.2	400.5
20°	3039.8	1726.5	712.2	456.8	420.1	405.6	390.2	380.0	369.7	368.0
22.5°	2968.9	1423.4	547.3	422.7	399.6	383.3	364.6	352.7	342.5	340.7
25°	2837.4	1139.1	461.0	401.3	381.7	362.0	341.5	325.3	315.9	314.3
27.5°	2670.9	894.8	418.4	381.7	358.6	340.7	317.6	302.3	293.8	292.0
30°	2474.6	689.1	393.6	359.5	331.3	315.9	295.4	282.6	277.5	277.5
32.5°	2262.8	550.7	383.3	337.3	307.4	290.3	274.1	269.0	267.2	266.4
35°	2063.8	478.2	378.2	319.4	286.1	269.8	263.0	263.8	267.2	267.2
37.5°	1887.1	455.1	375.7	306.6	267.2	252.8	257.0	264.7	261.3	261.3
40°	1727.4	457.7	374.0	297.1	251.9	243.3	251.9	245.9	237.4	236.6
42.5°	1605.3	479.0	370.5	289.5	242.5	236.6	233.1	223.8	222.8	224.6
45°	1516.5	497.8	369.7	286.1	232.3	221.2	216.9	207.5	224.6	228.9
47.5°	1411.4	497.8	369.7	274.1	215.1	210.9	204.1	193.8	210.9	215.1
50°	1275.7	466.2	355.3	260.5	201.5	199.0	187.0	174.1	170.8	173.3
52.5°	1104.0	409.0	318.5	241.7	187.9	182.8	168.2	158.8	156.2	156.2
55°	908.6	342.5	269.0	214.3	173.3	163.9	153.6	149.4	146.9	145.1
57.5°	738.6	281.0	216.1	190.4	159.7	147.7	144.3	139.2	134.9	132.3
60°	606.3	221.2	178.5	169.0	146.1	134.9	134.1	127.2	116.1	114.4
62.5°	467.9	162.3	150.3	146.9	132.3	123.0	121.3	107.6	90.5	87.1
65°	330.5	126.4	121.3	128.9	117.9	109.3	105.1	84.6	66.6	64.1
67.5°	232.3	105.9	95.6	112.7	102.5	91.3	88.8	71.8	55.5	53.8
70°	165.6	86.2	78.5	96.5	82.0	80.3	75.1	59.8	45.3	43.6
72.5°	117.0	65.7	60.6	83.6	56.4	69.2	61.5	46.1	34.1	32.5
75°	86.2	46.9	42.7	48.7	41.0	52.1	43.6	30.7	21.3	20.5
77.5°	63.1	29.9	25.6	23.9	23.9	32.5	23.9	12.8	9.4	8.5
80°	44.4	13.6	12.0	10.2	9.4	7.7	3.4	1.7	0.8	0.8
82.5°	26.4	5.9	5.9	4.3	2.6	0.0	0.0	0.0	0.0	0.0
85°	5.9	2.6	2.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	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)