

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: P965287

Luminaire Tested: **NAV-SB3D-835-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965287
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-835-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24166.4 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 218.1
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



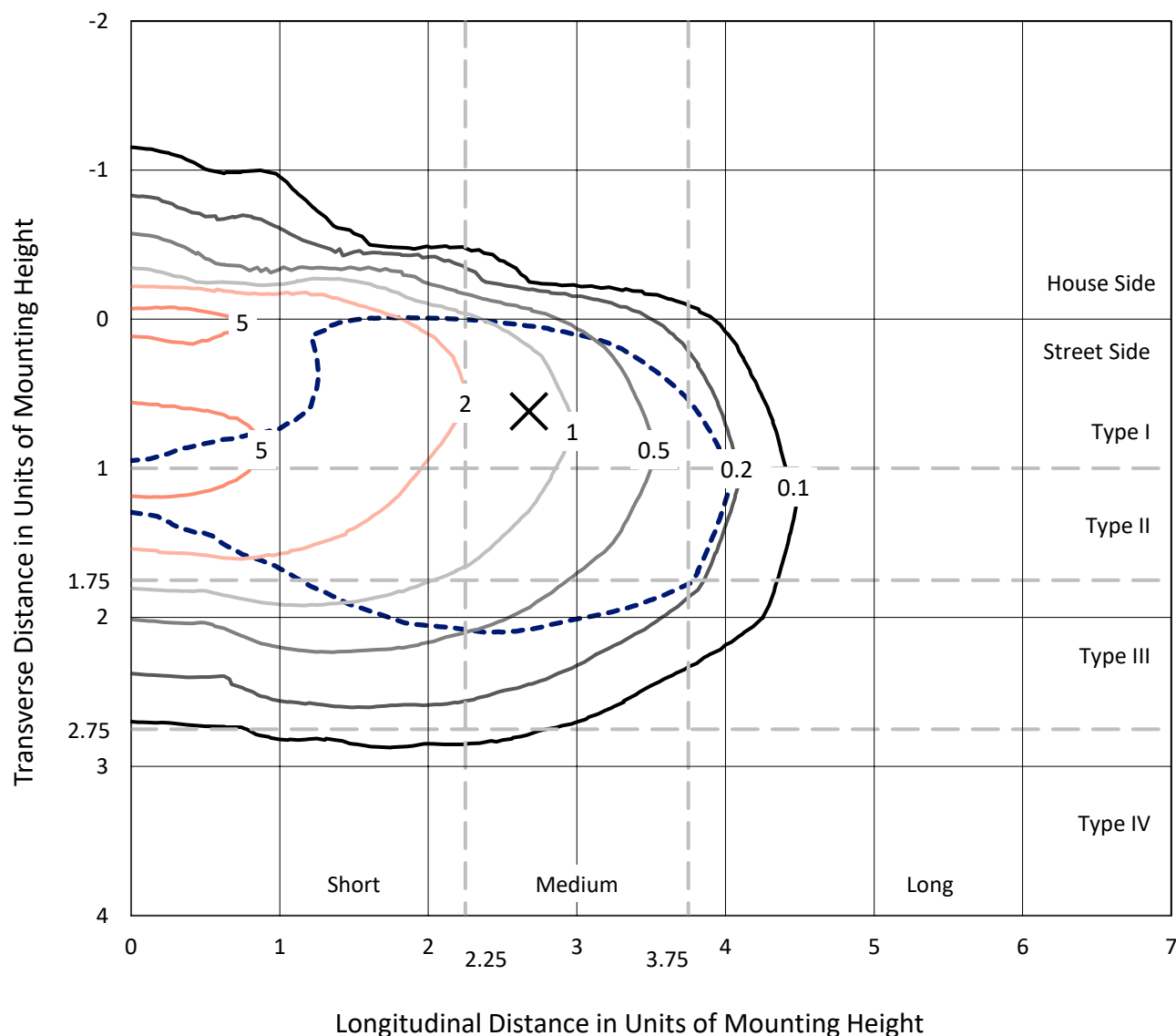
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

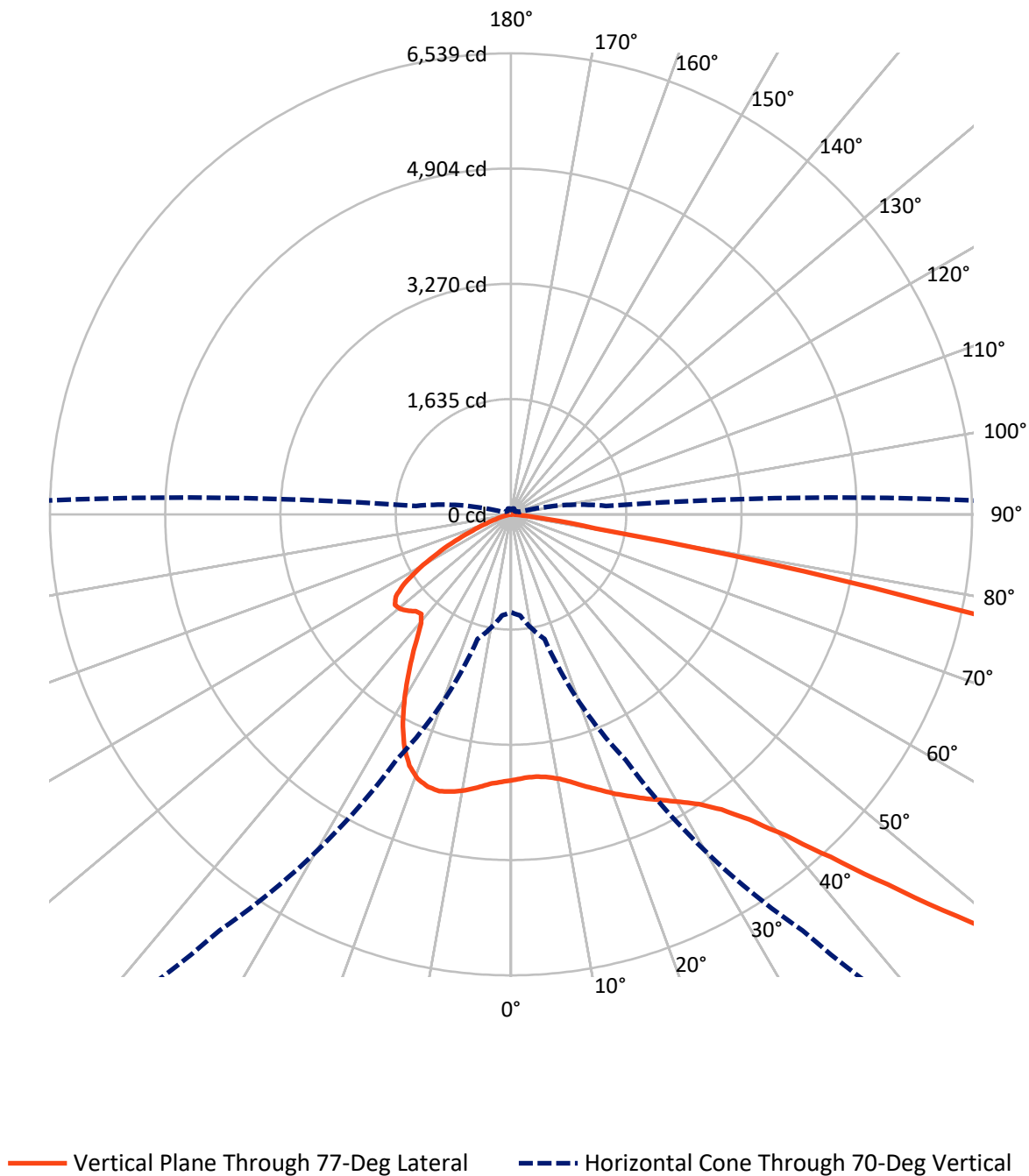
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2547.5	0.0	2547.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	21618.9	0.0	21618.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	24166.4	0.0	24166.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.9	1.3
10°-20°	771.2	3.2
20°-30°	1192.9	4.9
30°-40°	2164.5	9.0
40°-50°	4085.7	16.9
50°-60°	5903.6	24.4
60°-70°	6284.2	26.0
70°-80°	3330.2	13.8
80°-90°	109.3	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°	24166.4	100.0
0°-180°	24166.4	100.0

Coefficient of Utilization



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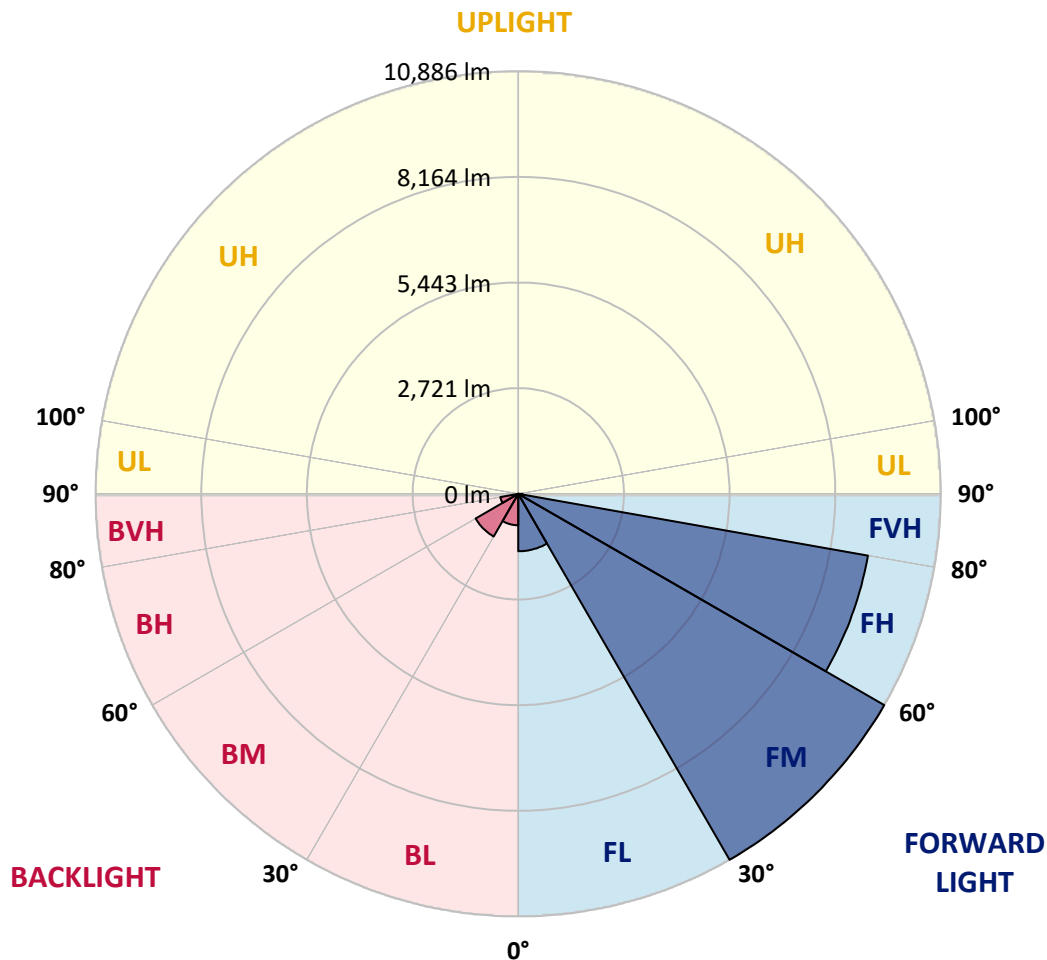
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1479.6	6.1			
FM	(30°-60°)	10885.6	45.0			
FH	(60°-80°)	9147.3	37.9			G4/12000
FVH	(80°-90°)	106.4	0.4			G2/225
BL	(0°-30°)	809.4	3.3	B2/1000		
BM	(30°-60°)	1268.1	5.2	B2/2500		
BH	(60°-80°)	467.0	1.9	B1/500		G1/500
BVH	(80°-90°)	2.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5
2.5°	3539.1	3571.1	3566.6	3587.9	3595.6	3626.0	3656.6	3697.8	3743.6	3742.1	3772.6
5°	3339.1	3371.2	3378.8	3407.8	3444.5	3491.8	3554.4	3636.8	3722.2	3735.9	3797.0
7.5°	3102.6	3136.2	3156.0	3214.0	3281.1	3378.8	3481.1	3601.6	3743.6	3763.4	3881.0
10°	2866.1	2896.5	2922.5	3004.9	3111.8	3256.7	3423.1	3597.0	3787.9	3816.8	3983.2
12.5°	2719.5	2748.5	2777.5	2849.3	2982.0	3159.0	3385.0	3618.5	3861.1	3902.3	4122.0
15°	2667.7	2693.6	2716.5	2780.6	2904.2	3105.6	3377.3	3662.7	3954.1	4009.1	4289.9
17.5°	2675.2	2689.0	2704.3	2753.1	2873.7	3081.3	3391.0	3739.0	4064.0	4112.9	4457.8
20°	2719.5	2727.2	2728.8	2762.3	2869.1	3078.2	3418.5	3812.3	4167.9	4233.5	4624.2
22.5°	2776.0	2779.1	2776.0	2798.9	2898.1	3101.0	3455.2	3900.7	4283.8	4344.9	4792.1
25°	3040.0	2982.0	2908.7	2864.6	2947.0	3145.3	3510.1	4019.8	4410.5	4470.0	4955.4
27.5°	3859.5	3693.2	3430.8	3136.2	3047.6	3209.5	3586.4	4140.4	4538.7	4592.1	5130.8
30°	5190.4	4972.1	4526.5	3862.6	3371.2	3343.8	3685.6	4260.9	4674.5	4732.5	5318.5
32.5°	6524.2	6470.7	5956.5	5037.8	4099.2	3642.8	3850.4	4424.2	4854.6	4900.4	5571.9
35°	7873.2	7764.9	7343.7	6435.7	5220.8	4251.8	4125.1	4637.9	5091.2	5143.0	5941.2
37.5°	8906.4	8840.8	8579.9	7832.0	6551.7	5191.8	4595.2	4969.1	5434.5	5492.6	6414.3
40°	9819.1	9788.5	9700.1	9207.1	8039.6	6421.9	5326.2	5481.8	5910.7	5979.3	6994.2
42.5°	10536.4	10608.1	10658.5	10521.1	9573.4	7826.0	6309.0	6202.2	6574.6	6644.8	7732.9
45°	11270.4	11294.9	11497.8	11696.2	11096.4	9294.1	7417.0	7046.2	7400.2	7487.1	8618.0
47.5°	11742.0	11839.7	12196.8	12546.3	12376.9	10750.0	8607.3	8042.7	8357.0	8520.3	9610.0
50°	11777.1	11961.7	12453.1	13062.1	13309.3	12135.7	9901.5	9178.2	9512.3	9692.4	10669.1
52.5°	11192.6	11479.5	12241.1	13132.3	13812.9	13309.3	11239.9	10313.6	10742.4	10977.4	11767.9
55°	8581.4	8956.9	11442.9	12750.8	13832.8	14199.0	12543.2	11496.3	12112.8	12378.4	12955.3
57.5°	7476.5	7665.8	8996.5	12088.4	13465.0	14557.7	13721.4	12622.6	13603.9	13933.5	14076.9
60°	6220.5	6469.3	7545.1	11004.9	12965.9	14592.8	14762.2	14075.4	15220.0	15590.9	15105.5
62.5°	4227.4	4497.5	5567.3	9143.0	12283.8	14576.0	15615.3	15571.1	17016.2	17414.6	15977.0
65°	2618.9	2788.2	3493.3	7465.8	11329.9	14594.4	16508.0	17387.2	18911.8	19316.1	16651.5
67.5°	2069.5	2147.3	2515.0	5732.1	9686.4	14182.3	17399.4	19094.8	20695.8	21016.3	16857.6
70°	1390.3	1437.6	1829.8	3842.8	7206.4	12280.7	17382.6	19952.5	21614.5	21774.7	16106.7
72.5°	732.6	769.2	1069.8	1779.5	4352.5	8729.4	14652.3	18927.0	20700.4	20459.2	13767.2
75°	366.2	427.3	720.4	903.4	1858.8	4868.3	9098.7	14922.5	16292.9	15358.9	8833.2
77.5°	277.8	335.8	595.2	595.2	647.1	1639.1	3853.5	8138.8	7507.0	6251.0	2592.8
80°	177.0	228.9	520.4	450.2	270.1	416.7	1004.2	2280.0	1594.8	1213.3	471.6
82.5°	103.7	149.5	433.4	297.6	151.1	154.2	283.8	485.3	413.6	322.1	144.9
85°	41.2	97.7	297.6	117.5	59.6	38.1	85.5	103.7	85.5	64.1	36.6
87.5°	0.0	22.9	51.9	0.0	4.6	3.1	6.1	7.6	7.6	6.1	12.2
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°	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5	3769.5
2.5°	3786.3	3789.3	3798.5	3800.1	3778.7	3751.2	3740.5	3735.9	3717.7	3716.1	3719.2
5°	3832.1	3845.8	3832.1	3792.4	3697.8	3565.1	3464.3	3381.9	3307.1	3284.2	3270.5
7.5°	3923.7	3937.4	3896.2	3740.5	3502.4	3238.4	3000.4	2832.5	2681.4	2624.9	2602.1
10°	4054.9	4073.2	3943.5	3629.1	3207.9	2783.7	2380.8	2096.9	1875.6	1785.6	1747.4
12.5°	4219.7	4227.4	3969.4	3459.7	2824.9	2219.0	1648.2	1344.5	1147.7	1074.4	1051.5
15°	4401.3	4390.7	3972.5	3229.3	2303.0	1568.9	1075.9	883.7	804.3	779.8	779.8
17.5°	4592.1	4547.8	3911.5	2896.5	1730.6	1072.9	798.2	752.3	738.6	732.6	731.0
20°	4779.8	4680.7	3800.1	2461.6	1242.3	801.2	724.9	711.1	703.6	700.5	697.4
22.5°	4950.8	4781.3	3609.3	1956.5	901.9	708.2	685.2	673.0	659.3	653.1	651.7
25°	5117.1	4839.3	3340.7	1484.9	721.9	662.4	644.0	621.2	602.8	595.2	592.1
27.5°	5278.9	4875.9	3004.9	1098.8	644.0	619.6	586.0	554.0	540.3	537.2	534.1
30°	5451.4	4888.2	2623.4	819.5	596.8	566.2	517.3	480.7	473.1	474.6	474.6
32.5°	5661.9	4906.5	2238.8	671.5	557.0	502.0	444.1	405.9	399.9	405.9	404.5
35°	5913.7	4943.2	1868.0	618.1	521.9	436.4	373.9	341.8	335.8	340.3	338.8
37.5°	6255.6	5002.6	1521.5	607.4	492.9	381.5	314.4	288.4	288.4	290.0	288.4
40°	6710.4	5161.4	1211.8	599.7	477.6	340.3	265.6	254.8	259.4	262.5	262.5
42.5°	7264.4	5498.6	1002.7	590.6	460.8	322.1	241.1	236.6	244.2	247.2	247.2
45°	7885.5	5925.9	929.4	575.3	445.7	334.3	230.4	224.4	233.5	235.0	236.6
47.5°	8528.0	6344.1	920.2	558.5	430.4	352.5	227.3	213.6	224.4	225.9	227.3
50°	9178.2	6617.3	929.4	532.6	405.9	352.5	228.9	203.0	212.2	216.7	218.2
52.5°	9832.8	6742.4	923.3	476.1	363.3	331.2	228.9	193.8	203.0	206.0	206.0
55°	10467.7	6718.0	830.2	392.2	308.3	293.0	222.8	186.1	192.3	193.8	193.8
57.5°	10969.8	6377.7	657.7	305.2	250.3	244.2	203.0	177.0	181.6	180.1	180.1
60°	11232.3	5629.9	470.1	235.0	196.9	192.3	178.6	164.8	167.9	160.2	158.7
62.5°	11235.3	4640.9	314.4	186.1	157.2	152.6	152.6	148.0	144.9	129.8	125.2
65°	10995.7	3543.6	209.1	148.0	126.7	119.0	128.2	126.7	116.0	94.6	91.5
67.5°	10452.4	2322.8	158.7	116.0	97.7	93.1	102.3	106.8	99.2	79.3	77.8
70°	9335.3	1352.2	131.2	90.0	73.3	68.7	82.4	91.5	82.4	64.1	61.1
72.5°	7754.2	729.5	106.8	67.1	50.3	45.8	65.6	74.8	65.6	47.4	45.8
75°	5031.6	390.7	82.4	44.3	25.9	29.0	48.8	54.9	45.8	30.5	27.5
77.5°	1689.4	172.4	51.9	21.3	12.2	12.2	29.0	33.6	21.3	10.7	9.1
80°	377.0	71.8	21.3	9.1	4.6	4.6	6.1	6.1	3.1	0.0	0.0
82.5°	123.6	29.0	9.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	47.4	10.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	18.3	1.5	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)