

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: P965097

Luminaire Tested: **NAV-SB3D-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23917.3 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

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

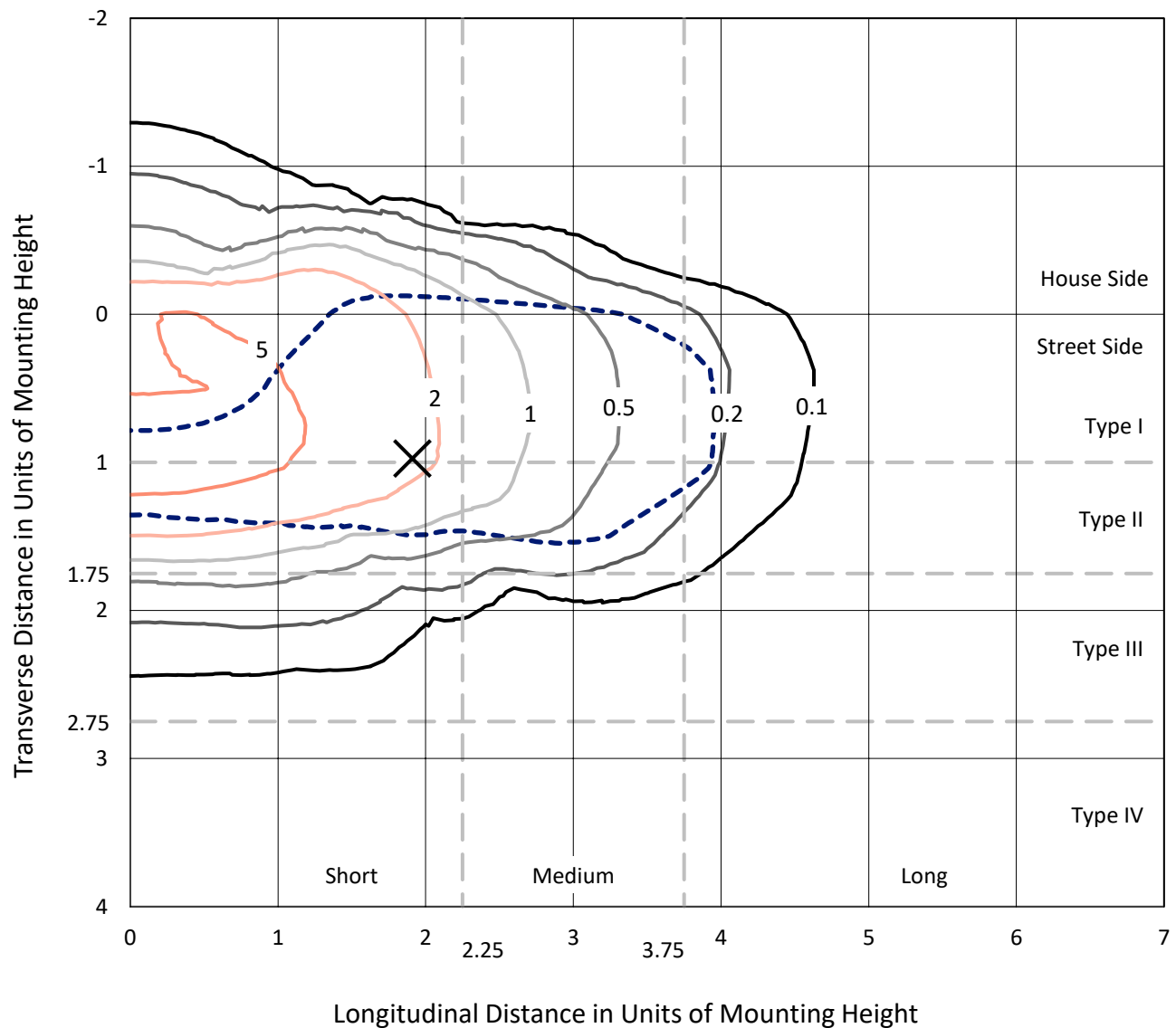


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Iso-Footcandle Lines of Horizontal Illumination

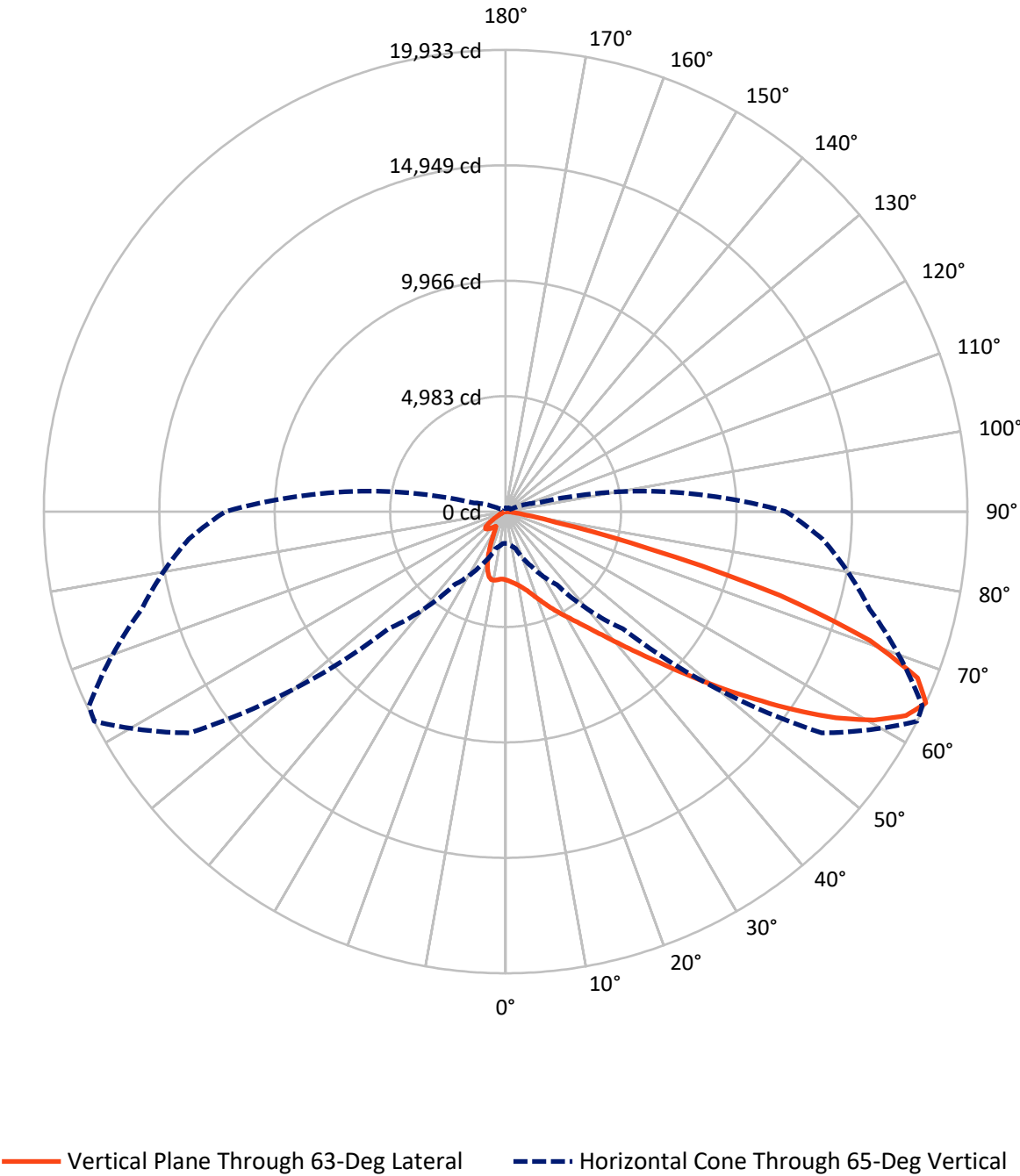
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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	3515.7	0.0	3515.7
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	20401.7	0.0	20401.7
	% Fixture	85.3	0.0	85.3
Total	Lumens	23917.3	0.0	23917.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.1	1.2
10°-20°	771.7	3.2
20°-30°	1343.7	5.6
30°-40°	2421.9	10.1
40°-50°	4803.3	20.1
50°-60°	6542.9	27.4
60°-70°	5222.5	21.8
70°-80°	2363.3	9.9
80°-90°	169.9	0.7
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°	23917.3	100.0
0°-180°	23917.3	100.0

Coefficient of Utilization



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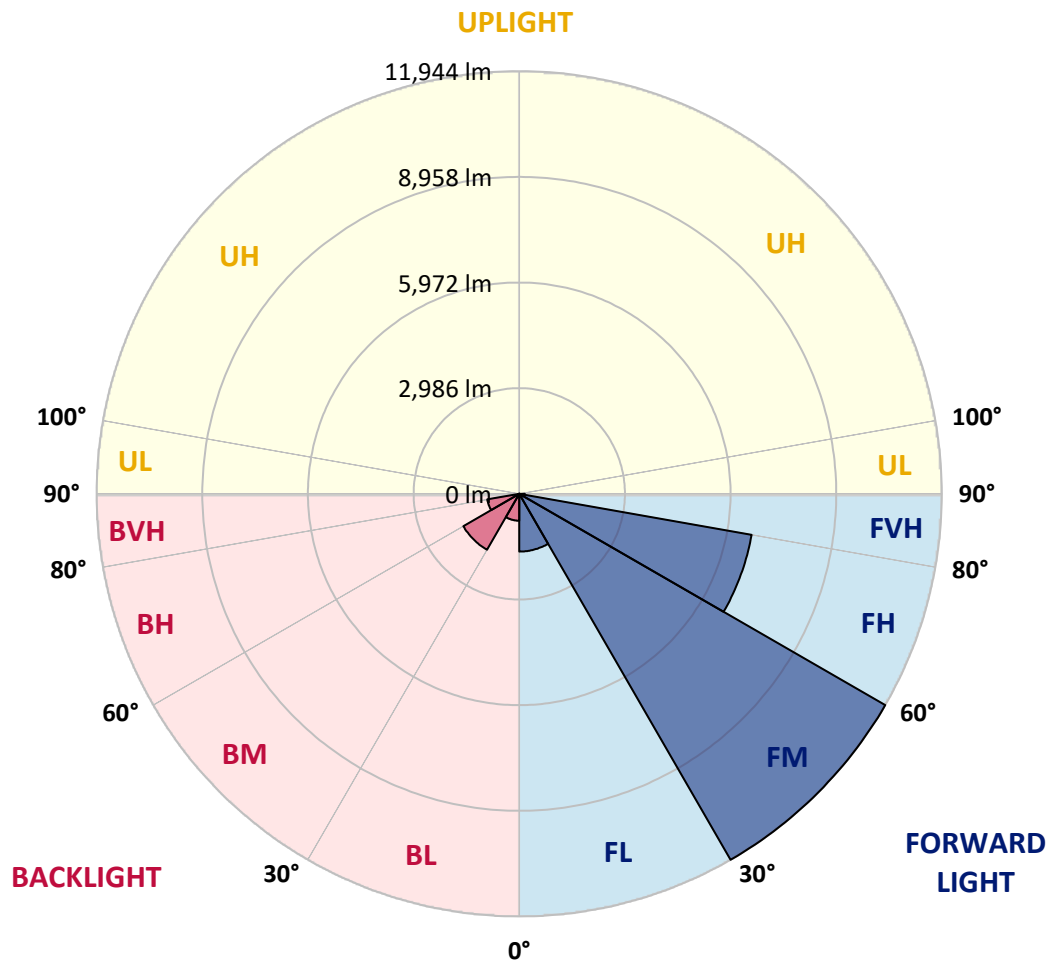
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1632.7	6.8			
FM	(30°-60°)	11943.7	49.9			
FH	(60°-80°)	6668.0	27.9			G3/7500
FVH	(80°-90°)	157.3	0.7			G2/225
BL	(0°-30°)	760.8	3.2	B2/1000		
BM	(30°-60°)	1824.4	7.6	B2/2500		
BH	(60°-80°)	917.8	3.8	B2/1000		G2/1000
BVH	(80°-90°)	12.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9
2.5°	3021.0	3012.8	3024.3	3019.3	3016.1	3009.4	3006.1	3002.8	2996.3	2991.4	2971.6
5°	3029.2	3024.3	3035.7	3045.7	3055.5	3065.4	3070.3	3076.9	3070.3	3057.2	3037.4
7.5°	2960.1	2956.8	2981.5	3011.0	3055.5	3093.3	3134.4	3157.5	3159.2	3154.2	3132.8
10°	2955.2	2946.9	2971.6	3007.8	3065.4	3132.8	3205.3	3254.6	3261.1	3282.6	3259.5
12.5°	3032.5	3024.3	3058.8	3098.3	3157.5	3228.2	3317.1	3386.2	3396.1	3425.8	3409.3
15°	3162.4	3151.0	3190.4	3241.5	3317.1	3397.8	3491.6	3554.1	3562.3	3598.5	3568.8
17.5°	3313.8	3302.3	3348.4	3402.7	3485.0	3595.2	3703.8	3772.9	3782.8	3805.8	3751.5
20°	3508.0	3493.2	3529.4	3578.8	3665.9	3797.6	3927.6	4026.3	4024.7	4024.7	3935.8
22.5°	3733.5	3710.4	3741.7	3781.1	3863.4	4023.0	4195.7	4312.6	4312.6	4266.6	4120.1
25°	3975.3	3952.3	3986.8	4023.0	4095.4	4276.4	4478.7	4623.6	4630.1	4551.2	4317.5
27.5°	4278.0	4248.4	4274.8	4317.5	4360.3	4544.6	4784.8	4952.7	4956.0	4834.2	4505.1
30°	4860.5	4776.6	4694.3	4648.3	4668.1	4850.6	5107.4	5293.3	5309.7	5141.9	4709.2
32.5°	5926.8	5910.3	5620.7	5242.3	5044.8	5179.7	5467.7	5691.4	5701.4	5485.8	4974.0
35°	7583.7	7563.9	7098.2	6377.5	5734.3	5620.7	5905.3	6170.3	6163.6	5920.2	5317.9
37.5°	9561.4	9543.4	8929.6	7965.4	6923.9	6287.0	6469.7	6747.8	6788.9	6469.7	5762.2
40°	11251.2	11183.8	10795.5	9865.8	8503.4	7392.8	7272.7	7457.0	7499.7	7121.3	6326.6
42.5°	12531.3	12473.8	12276.3	11695.6	10415.4	9028.3	8218.8	8289.6	8337.2	7883.2	6974.8
45°	13194.5	13181.3	13260.3	13206.0	12363.6	11035.8	9571.3	9276.8	9294.9	8727.3	7710.4
47.5°	13288.3	13281.6	13642.0	14152.1	14038.6	13299.8	11307.2	10507.6	10443.4	9679.9	8510.1
50°	12735.4	12722.3	13413.4	14369.3	15157.5	15201.9	13278.4	11894.6	11753.2	10665.5	9344.2
52.5°	10969.9	10966.6	12102.0	13693.1	15550.7	16867.0	15226.6	13418.3	13181.3	11708.7	10226.2
55°	8440.9	8501.8	9803.3	11684.0	14833.3	17668.3	16975.6	15109.7	14746.1	12758.5	11039.0
57.5°	5979.4	6068.2	7355.0	9029.9	12608.7	17194.5	18158.7	16804.5	16412.9	13804.9	11863.3
60°	3211.8	3290.8	4579.2	6578.3	9380.5	15427.3	18782.3	18275.4	17905.3	14798.7	12607.1
62.5°	1913.6	1939.9	2473.0	4246.8	6344.6	11786.1	18517.3	19396.0	19091.6	15633.0	13253.8
65°	1373.9	1378.8	1647.1	2593.1	3851.8	7160.8	16659.7	19932.5	19838.7	16261.5	13732.5
67.5°	1156.7	1153.4	1265.4	1722.7	2624.4	3587.0	12768.3	19173.9	19572.1	16659.7	14004.1
70°	992.2	997.1	1128.7	1262.0	1972.8	2030.4	6347.9	16694.3	17543.3	16765.0	13987.6
72.5°	738.8	755.2	877.0	1150.2	1489.1	1397.0	2191.7	12378.4	13913.6	15795.9	13262.0
75°	521.6	529.8	617.0	967.5	1110.7	1016.9	1118.9	6399.0	8366.9	12110.2	10854.7
77.5°	401.5	416.3	467.3	676.3	1094.2	714.1	684.5	2214.7	3402.7	7315.4	7442.1
80°	217.2	243.5	337.3	488.7	768.4	505.1	339.0	881.9	1153.4	3420.8	2869.6
82.5°	111.9	125.0	235.3	352.1	437.7	441.0	167.8	367.0	475.5	1056.4	393.3
85°	44.4	54.3	158.0	194.1	225.4	217.2	75.6	148.1	171.1	292.8	120.1
87.5°	9.8	16.5	57.6	44.4	42.7	46.0	18.1	34.5	32.9	34.5	21.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9	2951.9
2.5°	2969.9	2963.4	2945.2	2925.6	2902.5	2889.4	2881.1	2879.4	2868.0	2859.7	2868.0
5°	3019.3	3012.8	2978.1	2937.0	2892.7	2858.1	2825.2	2795.6	2752.7	2744.5	2741.3
7.5°	3118.0	3099.9	3044.0	2988.1	2904.1	2803.8	2682.0	2542.1	2417.1	2379.2	2361.2
10°	3239.8	3215.1	3144.4	3045.7	2859.7	2586.6	2292.0	2018.9	1801.7	1740.9	1717.8
12.5°	3378.0	3356.7	3262.9	3080.2	2673.8	2178.5	1727.6	1388.7	1178.1	1125.4	1110.7
15°	3542.5	3511.2	3381.3	3027.5	2341.4	1655.3	1186.3	985.6	909.9	900.1	890.2
17.5°	3717.0	3665.9	3486.6	2838.3	1893.9	1176.5	916.5	859.0	825.9	816.1	811.2
20°	3876.6	3810.7	3549.2	2552.0	1415.0	916.5	821.0	783.2	753.6	742.1	735.5
22.5°	4036.1	3942.4	3549.2	2162.0	1061.3	812.8	753.6	719.0	684.5	669.6	661.4
25°	4202.4	4077.3	3486.6	1727.6	853.9	745.4	689.4	651.6	622.0	603.8	597.3
27.5°	4363.6	4190.8	3343.4	1316.3	760.1	686.1	630.2	594.0	566.0	552.9	552.9
30°	4516.7	4302.7	3142.8	998.8	699.3	628.5	575.8	544.6	516.7	503.5	505.1
32.5°	4723.9	4444.2	2928.8	819.4	646.7	574.2	526.5	496.9	472.2	462.4	462.4
35°	5011.9	4653.2	2744.5	804.6	602.2	529.8	482.1	454.2	429.5	421.2	421.2
37.5°	5420.0	4990.5	2647.5	903.3	566.0	490.4	445.9	416.3	393.3	386.6	385.0
40°	5923.5	5448.0	2700.1	1002.0	541.3	455.8	413.0	383.3	363.7	355.4	353.7
42.5°	6520.7	6012.3	2991.4	1077.8	524.9	426.2	381.7	348.8	335.7	332.4	332.4
45°	7206.9	6632.6	3437.2	1158.4	498.6	398.2	350.4	325.7	315.9	314.3	312.6
47.5°	7986.8	7313.8	3953.9	1258.7	472.2	371.9	325.7	309.3	301.1	297.9	297.9
50°	8760.2	7999.9	4485.4	1314.7	450.8	347.2	306.1	292.8	286.3	284.6	284.6
52.5°	9569.7	8705.8	4914.8	1262.0	432.8	327.4	289.6	279.7	273.2	271.5	271.5
55°	10341.3	9276.8	4988.9	1071.1	396.6	307.7	271.5	266.6	258.3	258.3	256.7
57.5°	11006.1	9563.0	4465.6	786.5	360.4	278.1	253.4	248.5	241.9	240.3	238.6
60°	11616.5	9480.8	3447.1	529.8	320.8	248.5	230.3	227.0	220.5	212.3	210.6
62.5°	11960.4	9118.8	2357.9	345.5	281.4	217.2	204.1	202.3	187.6	171.1	167.8
65°	12090.4	8375.1	1471.0	251.7	235.3	185.9	176.1	172.8	151.4	133.2	131.6
67.5°	11976.9	7150.9	742.1	199.1	185.9	154.7	144.8	144.8	130.0	113.6	111.9
70°	11522.7	5360.7	312.6	159.6	143.2	118.5	118.5	125.0	110.3	92.1	90.5
72.5°	10537.2	3606.8	166.2	121.8	106.9	83.9	97.1	102.0	87.2	69.1	69.1
75°	8376.7	2199.9	115.2	90.5	67.4	59.2	74.0	77.3	59.2	46.0	44.4
77.5°	5729.3	1263.6	77.3	57.6	42.7	34.5	51.0	47.8	31.3	21.4	23.1
80°	2515.9	526.5	44.4	26.3	16.5	13.1	18.1	13.1	9.8	6.6	6.6
82.5°	294.5	123.4	16.5	9.8	6.6	3.3	1.6	0.0	0.0	0.0	0.0
85°	60.9	14.8	8.2	3.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.5	3.3	1.6	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)