

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: P966812

Luminaire Tested: **NAV-SB4C-827-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-827-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26700.2 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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



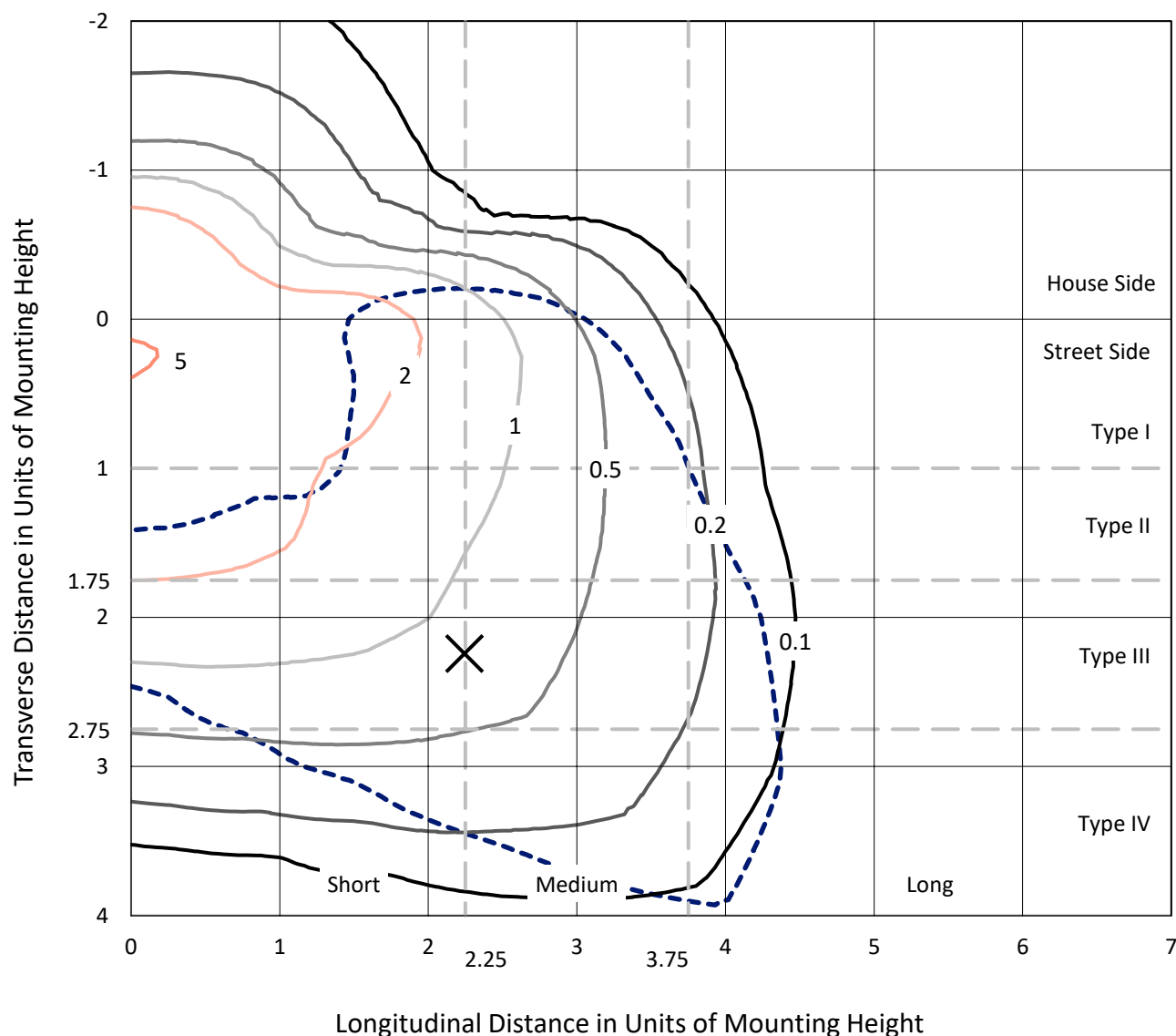
REPORT NUMBER: P966812

CATALOG NUMBER: NAV-SB4C-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

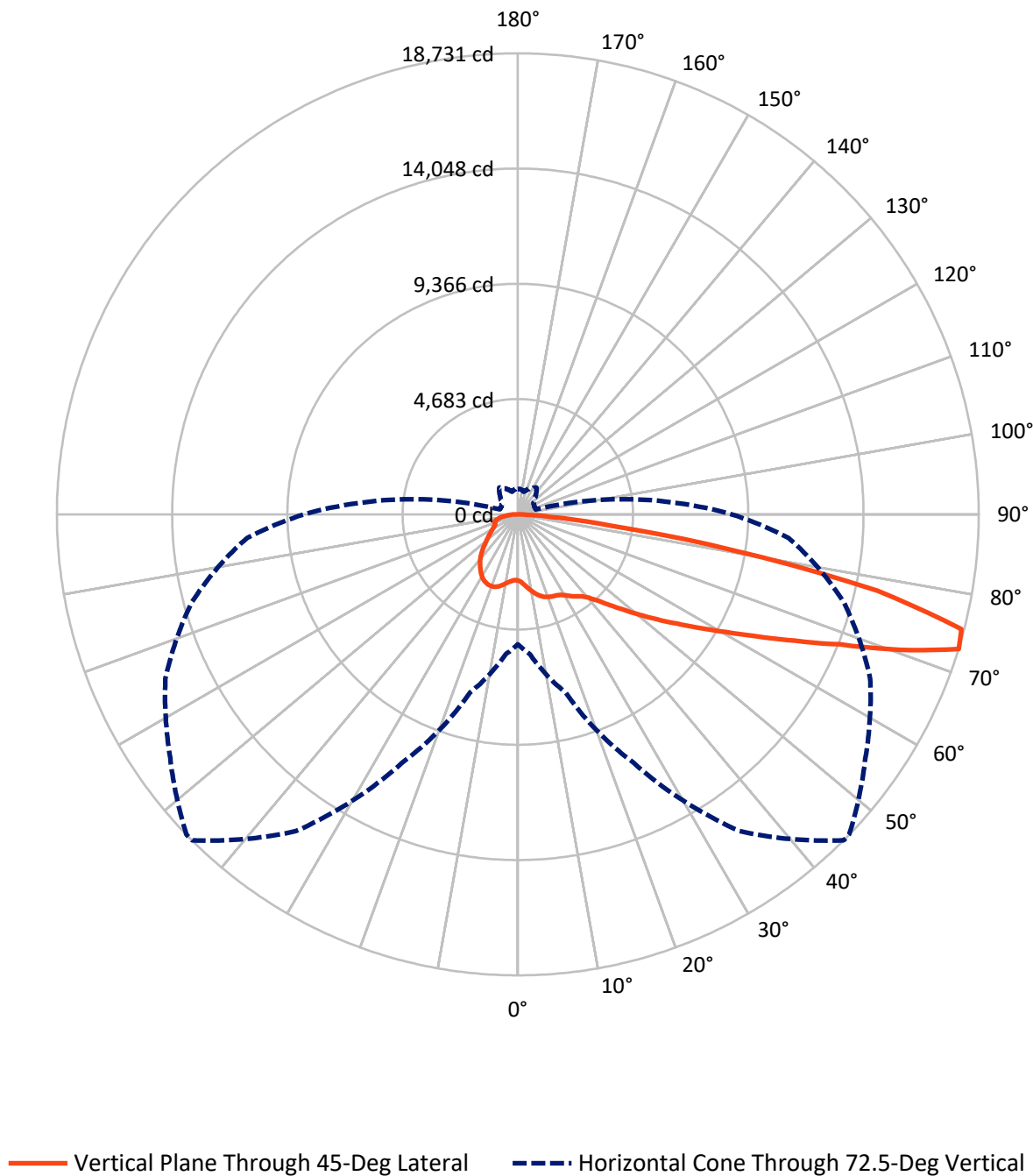


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc

Type IV - Short - N/A

REPORT NUMBER: P966812
CATALOG NUMBER: NAV-SB4C-827-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P966812

CATALOG NUMBER: NAV-SB4C-827-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6036.0	0.0	6036.0
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	20664.2	0.0	20664.2
	% Fixture	77.4	0.0	77.4
Total	Lumens	26700.2	0.0	26700.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.1	1.0
10°-20°	914.0	3.4
20°-30°	1590.0	6.0
30°-40°	2279.4	8.5
40°-50°	3209.5	12.0
50°-60°	4916.1	18.4
60°-70°	7121.6	26.7
70°-80°	5687.1	21.3
80°-90°	708.3	2.7
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°	26700.2	100.0
0°-180°	26700.2	100.0

Coefficient of Utilization



REPORT NUMBER: P966812

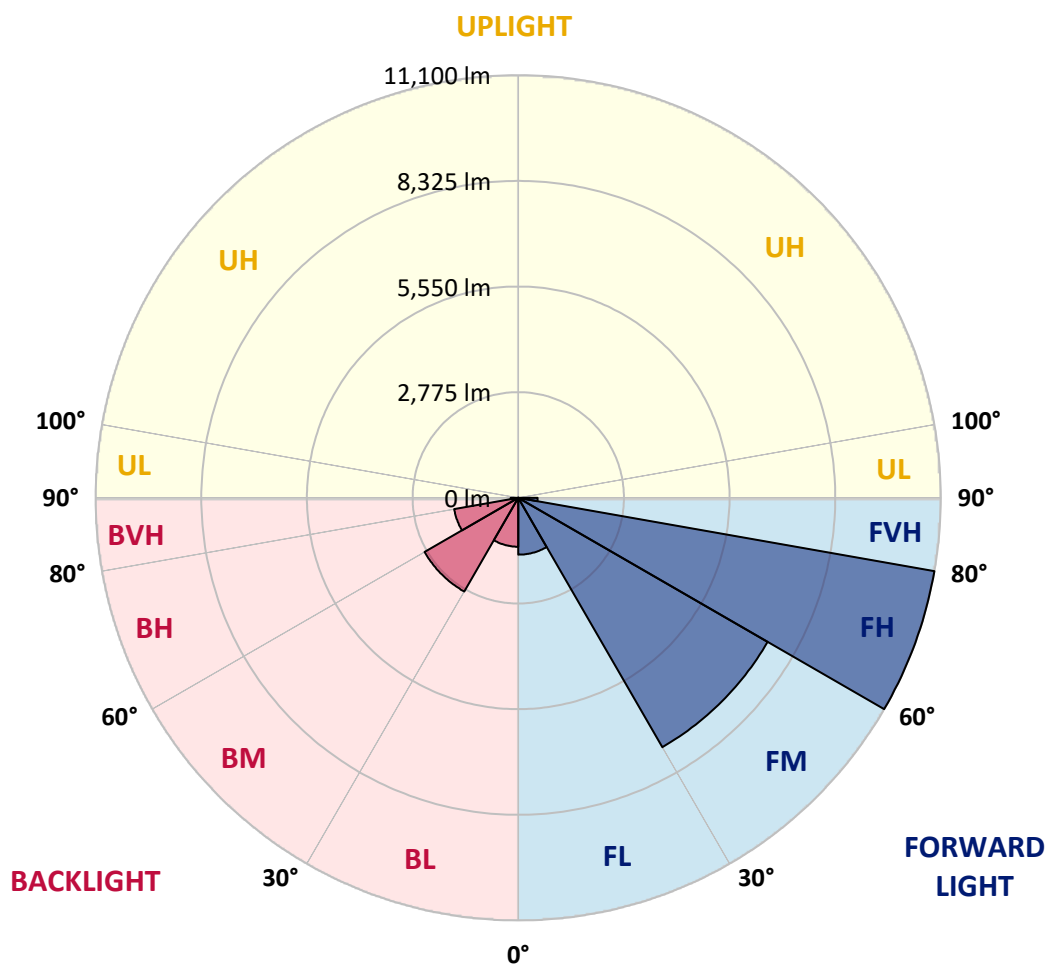
CATALOG NUMBER: NAV-SB4C-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1493.1	5.6			
FM	(30°-60°)	7562.9	28.3			
FH	(60°-80°)	11100.1	41.6			G4/12000
FVH	(80°-90°)	508.1	1.9			G4/750
BL	(0°-30°)	1285.1	4.8	B3/2500		
BM	(30°-60°)	2842.1	10.6	B3/5000		
BH	(60°-80°)	1708.6	6.4	B3/2500		G3/2500
BVH	(80°-90°)	200.2	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



REPORT NUMBER: P966812

CATALOG NUMBER: NAV-SB4C-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5
2.5°	2799.1	2817.3	2800.4	2784.9	2778.0	2759.6	2758.3	2747.0	2739.9	2720.2	2714.6
5°	2994.5	3018.4	2990.3	2959.4	2931.2	2886.2	2880.6	2848.3	2811.7	2769.4	2745.6
7.5°	3215.3	3236.4	3204.1	3157.7	3108.4	3033.9	3032.5	2973.4	2915.8	2844.1	2803.3
10°	3408.0	3436.2	3392.5	3329.3	3267.4	3183.0	3173.2	3105.6	3032.5	2939.7	2877.8
12.5°	3578.3	3598.0	3555.7	3478.3	3406.7	3322.2	3309.6	3235.0	3153.5	3047.9	2969.2
15°	3713.3	3738.6	3682.3	3599.4	3523.4	3440.4	3429.1	3361.7	3280.1	3169.0	3067.7
17.5°	3801.9	3822.9	3765.3	3672.5	3599.4	3530.4	3522.0	3465.7	3394.0	3281.4	3173.2
20°	3835.7	3858.2	3797.6	3703.4	3635.9	3582.5	3578.3	3537.5	3488.3	3385.6	3275.8
22.5°	3869.4	3890.5	3811.8	3713.3	3654.2	3620.4	3619.1	3592.3	3572.6	3488.3	3381.4
25°	4005.8	4011.4	3906.0	3763.9	3679.5	3650.0	3648.6	3647.2	3655.6	3589.6	3495.2
27.5°	4124.0	4122.5	4032.6	3898.9	3768.1	3706.2	3704.9	3718.9	3745.7	3690.8	3613.4
30°	4297.0	4281.5	4174.6	4035.4	3915.8	3820.2	3811.8	3799.1	3820.2	3776.6	3731.5
32.5°	4664.1	4614.9	4441.8	4194.3	4038.2	3965.0	3953.8	3875.0	3883.5	3856.8	3834.2
35°	5190.2	5125.4	4894.8	4495.3	4190.1	4086.1	4080.4	3980.5	3963.7	3939.7	3948.2
37.5°	5816.1	5735.9	5467.2	4931.4	4451.7	4226.7	4218.2	4128.2	4059.3	4034.0	4081.8
40°	6444.8	6343.5	6121.3	5463.0	4837.1	4461.5	4434.9	4298.4	4219.6	4177.4	4278.8
42.5°	7055.2	6970.8	6781.0	6059.4	5312.5	4804.8	4745.6	4512.2	4453.1	4413.8	4596.6
45°	7595.4	7519.4	7380.1	6696.5	5869.6	5271.8	5214.1	4832.9	4814.6	4814.6	5079.1
47.5°	8034.2	8017.3	7869.6	7346.4	6526.4	5803.4	5703.5	5278.7	5328.0	5403.9	5764.0
50°	8520.8	8474.4	8316.8	7986.4	7298.5	6412.4	6330.8	5825.9	6010.2	6218.4	6754.2
52.5°	8968.1	8993.5	8817.7	8653.0	8170.6	7091.8	6948.4	6471.5	6869.6	7214.2	7914.6
55°	9428.1	9429.5	9380.3	9357.7	9084.9	7842.9	7685.3	7247.9	7880.9	8308.4	9267.7
57.5°	9859.9	9862.7	9935.8	10134.2	10145.4	8709.3	8530.7	8201.5	9004.7	9440.8	10663.0
60°	10245.3	10265.0	10464.7	10928.9	11078.0	9702.3	9533.5	9328.2	10166.5	10605.4	12130.1
62.5°	10374.6	10446.4	10890.8	11550.5	11999.3	10920.5	10754.4	10632.1	11387.3	11795.3	13356.6
65°	10155.3	10319.8	11179.3	12063.9	12947.3	12367.8	12203.1	12069.6	12656.1	13040.0	14363.6
67.5°	9616.6	9828.9	11162.4	12602.7	14097.7	14109.0	13955.8	13642.0	14016.3	14163.9	14691.3
70°	8197.3	8515.2	10179.2	12803.8	15418.6	16490.3	16342.6	15535.3	15373.6	14659.0	13768.6
72.5°	5281.6	5709.1	7495.5	11148.3	15712.5	18731.0	18722.5	17244.2	15802.5	13697.0	11042.7
75°	1927.0	2188.6	3482.6	6997.6	13189.2	18617.1	18671.9	16951.7	14425.5	10580.0	6879.4
77.5°	701.8	767.9	1136.5	2689.3	8111.5	14937.5	15051.4	13552.0	10267.7	5309.7	2725.9
80°	368.5	405.1	582.3	1043.7	3475.6	8871.1	9049.7	8053.8	4825.9	1599.2	817.2
82.5°	204.0	220.8	326.4	566.8	1565.5	3793.4	3900.3	3181.6	1697.7	677.9	337.5
85°	109.7	116.7	153.3	309.4	765.2	1315.1	1344.7	950.8	676.5	398.0	163.2
87.5°	32.4	39.4	50.6	98.5	299.6	295.4	302.4	188.5	267.2	201.1	53.4
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: P966812

CATALOG NUMBER: NAV-SB4C-827-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5	2693.5
2.5°	2706.2	2702.0	2686.5	2679.5	2671.0	2669.6	2676.7	2678.0	2679.5	2680.9	2686.5
5°	2731.5	2717.5	2703.3	2694.9	2697.8	2699.1	2713.2	2723.1	2730.1	2735.7	2738.5
7.5°	2780.7	2769.4	2745.6	2744.1	2748.4	2761.0	2779.3	2801.8	2814.4	2824.4	2827.2
10°	2853.9	2832.8	2804.6	2808.9	2817.3	2835.6	2873.6	2891.8	2912.9	2931.2	2927.0
12.5°	2928.4	2910.2	2877.8	2880.6	2894.7	2927.0	2963.6	2986.1	3000.2	3014.2	3019.9
15°	3025.5	2993.1	2957.9	2957.9	2983.3	3018.4	3035.3	3053.6	3062.1	3077.6	3083.1
17.5°	3125.3	3083.1	3036.8	3033.9	3064.9	3081.8	3091.6	3094.4	3097.2	3114.1	3119.7
20°	3225.2	3178.8	3112.7	3107.1	3114.1	3111.3	3109.8	3107.1	3111.3	3132.4	3140.8
22.5°	3323.7	3270.3	3178.8	3153.5	3133.7	3107.1	3105.6	3104.2	3107.1	3128.2	3142.2
25°	3439.0	3374.3	3251.9	3176.0	3109.8	3073.3	3077.6	3078.9	3081.8	3098.6	3121.1
27.5°	3564.2	3492.5	3319.5	3169.0	3049.4	3024.1	3017.1	3021.3	3031.1	3057.8	3084.5
30°	3689.4	3604.9	3381.4	3140.8	2973.4	2938.3	2915.8	2925.7	2956.5	2983.3	3012.8
32.5°	3803.3	3718.9	3430.6	3078.9	2876.4	2821.5	2792.0	2804.6	2835.6	2845.4	2880.6
35°	3936.9	3841.3	3451.7	2980.5	2770.9	2686.5	2647.2	2628.8	2644.3	2634.5	2665.4
37.5°	4086.1	3986.1	3448.8	2851.0	2647.2	2550.1	2495.3	2426.3	2394.0	2360.2	2381.3
40°	4306.8	4163.3	3415.1	2694.9	2493.8	2405.2	2306.8	2190.0	2116.8	2050.7	2054.9
42.5°	4607.9	4409.5	3353.2	2523.3	2320.8	2237.8	2104.2	1967.8	1852.4	1742.7	1732.9
45°	5056.5	4731.6	3275.8	2340.5	2133.7	2052.2	1907.3	1754.0	1623.2	1482.5	1465.6
47.5°	5703.5	5164.9	3202.7	2132.3	1936.8	1862.2	1731.4	1589.4	1434.7	1298.3	1282.8
50°	6592.5	5786.5	3135.2	1929.8	1742.7	1686.4	1582.4	1437.5	1281.4	1171.7	1164.6
52.5°	7723.4	6631.9	3107.1	1734.3	1561.3	1540.2	1457.1	1322.1	1174.4	1081.7	1074.6
55°	9021.5	7643.1	3107.1	1547.2	1402.3	1409.4	1351.7	1226.5	1098.5	1015.6	1007.1
57.5°	10346.6	8667.1	3050.8	1374.2	1267.3	1296.8	1260.2	1150.6	1035.2	949.5	935.3
60°	11567.4	9525.1	2823.0	1216.7	1147.7	1194.1	1170.2	1076.0	935.3	863.7	852.4
62.5°	12505.6	10009.0	2384.0	1091.5	1049.3	1102.7	1090.1	977.5	917.1	887.5	877.7
65°	12975.4	9930.2	1822.9	980.4	966.3	1049.3	1022.5	1018.3	970.5	936.7	925.5
67.5°	12687.0	9252.3	1322.1	898.8	918.5	1000.1	1102.7	1119.6	1031.0	964.9	953.7
70°	11422.6	8025.7	984.6	821.4	858.0	1001.4	1257.5	1171.7	1011.3	934.0	921.3
72.5°	8689.6	5984.9	763.7	739.8	779.2	1008.5	1326.4	1147.7	955.1	1032.4	1024.0
75°	4969.3	3285.6	613.3	640.0	680.8	942.4	1291.2	1085.9	911.4	948.0	948.0
77.5°	1894.6	1263.1	506.4	541.5	547.1	822.9	1234.9	1081.7	867.9	846.8	772.2
80°	656.8	493.7	419.1	430.4	423.3	731.4	1184.3	941.0	710.3	635.8	614.7
82.5°	268.7	246.1	331.9	317.9	301.0	568.3	956.4	769.4	580.9	513.4	507.8
85°	116.7	156.1	219.5	192.7	174.5	393.8	766.6	651.2	490.9	423.3	422.0
87.5°	23.9	59.0	92.9	87.2	90.0	263.0	544.4	462.8	347.4	260.2	204.0
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)