

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: P884654

Luminaire Tested: **NAV-SB5C-827-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30607 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

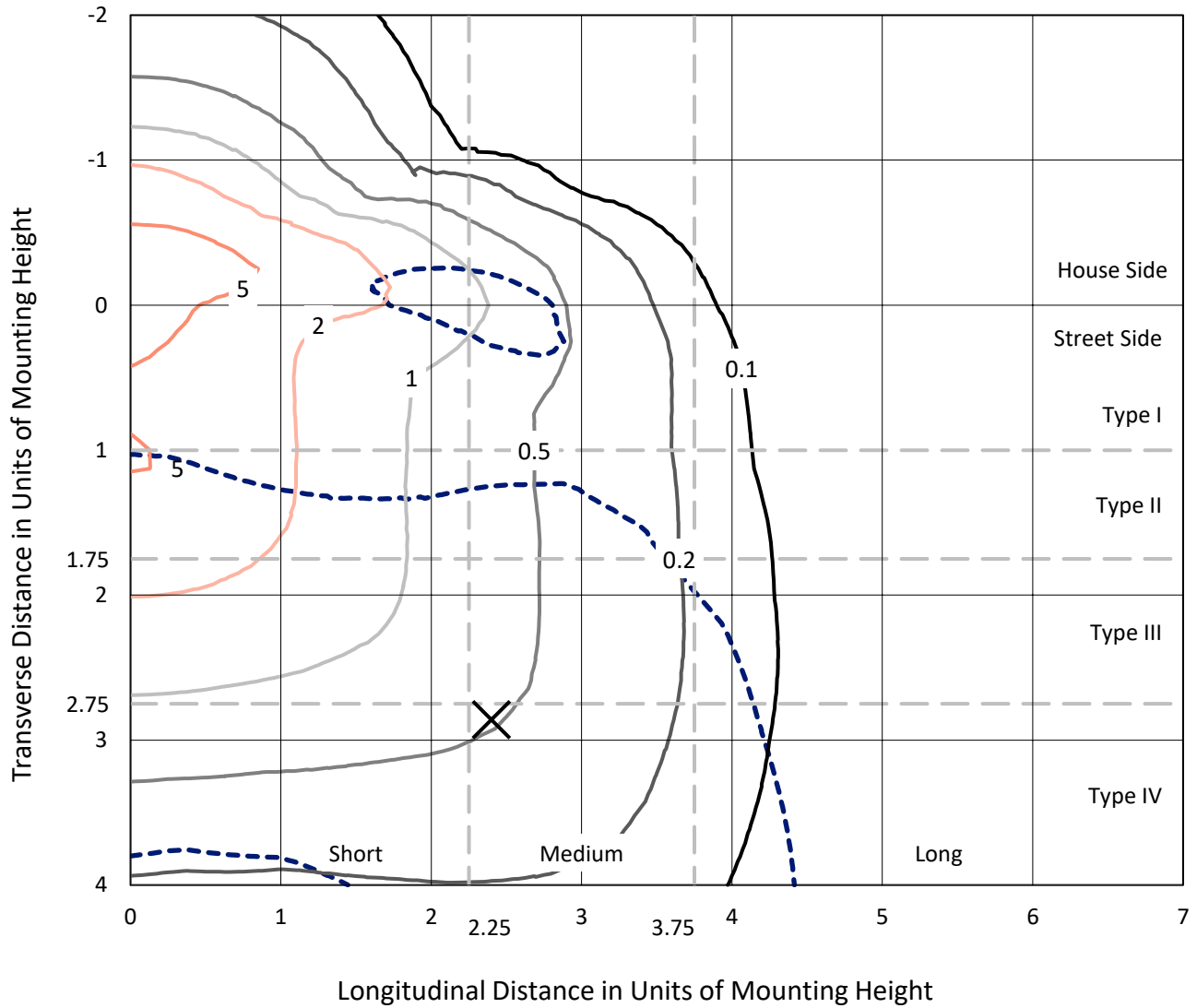
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884654
 CATALOG NUMBER: NAV-SB5C-827-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

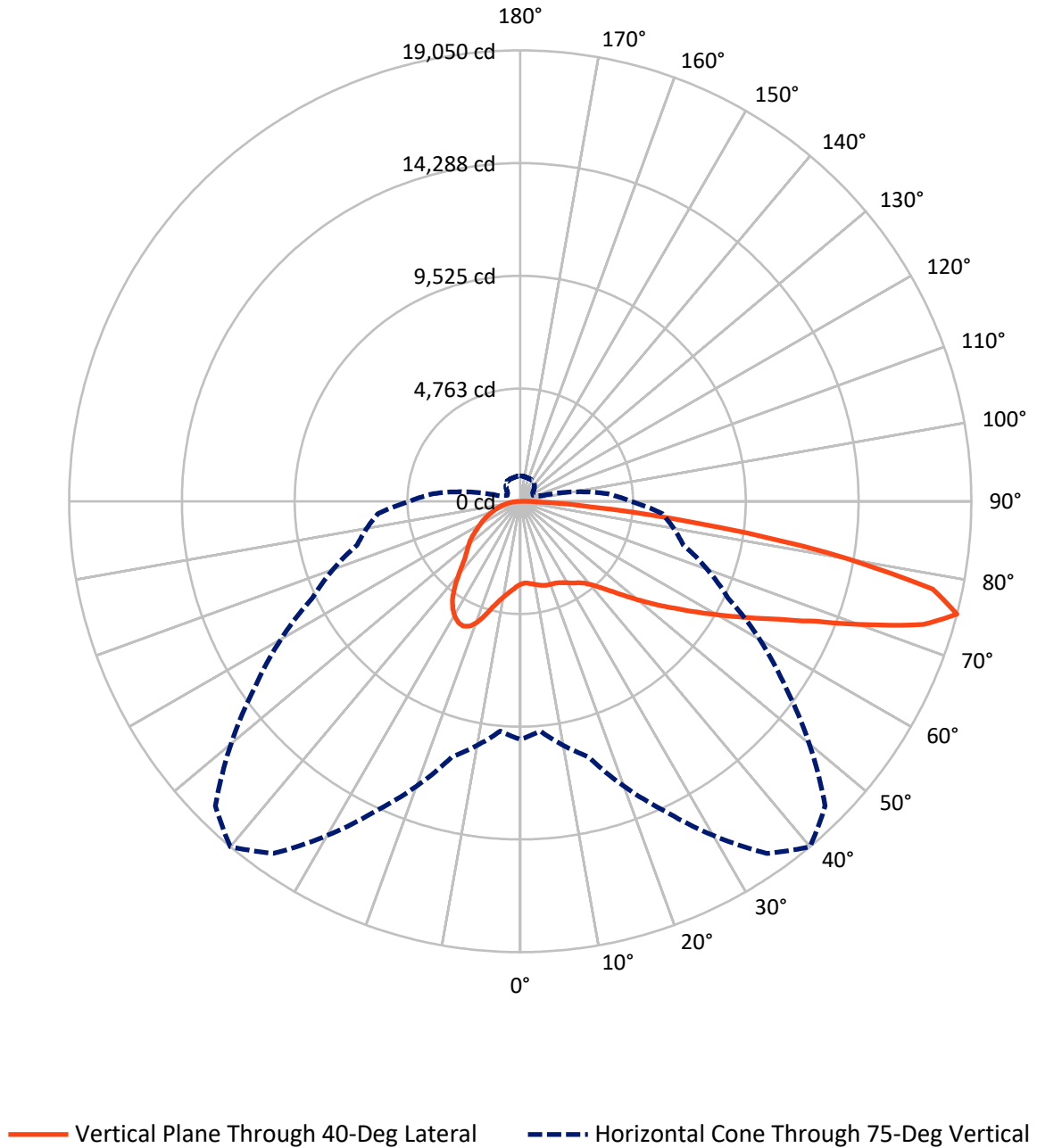
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Medium - N/A

REPORT NUMBER: P884654
CATALOG NUMBER: NAV-SB5C-827-U-SL4

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9483.1	0.0	9483.1
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	21123.9	0.0	21123.9
	% Fixture	69.0	0.0	69.0
Total	Lumens	30607.0	0.0	30607.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.4	1.1
10°-20°	1173.0	3.8
20°-30°	2141.7	7.0
30°-40°	3037.6	9.9
40°-50°	4101.6	13.4
50°-60°	5517.8	18.0
60°-70°	7003.4	22.9
70°-80°	6356.0	20.8
80°-90°	926.5	3.0
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°	30607.0	100.0
0°-180°	30607.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884654

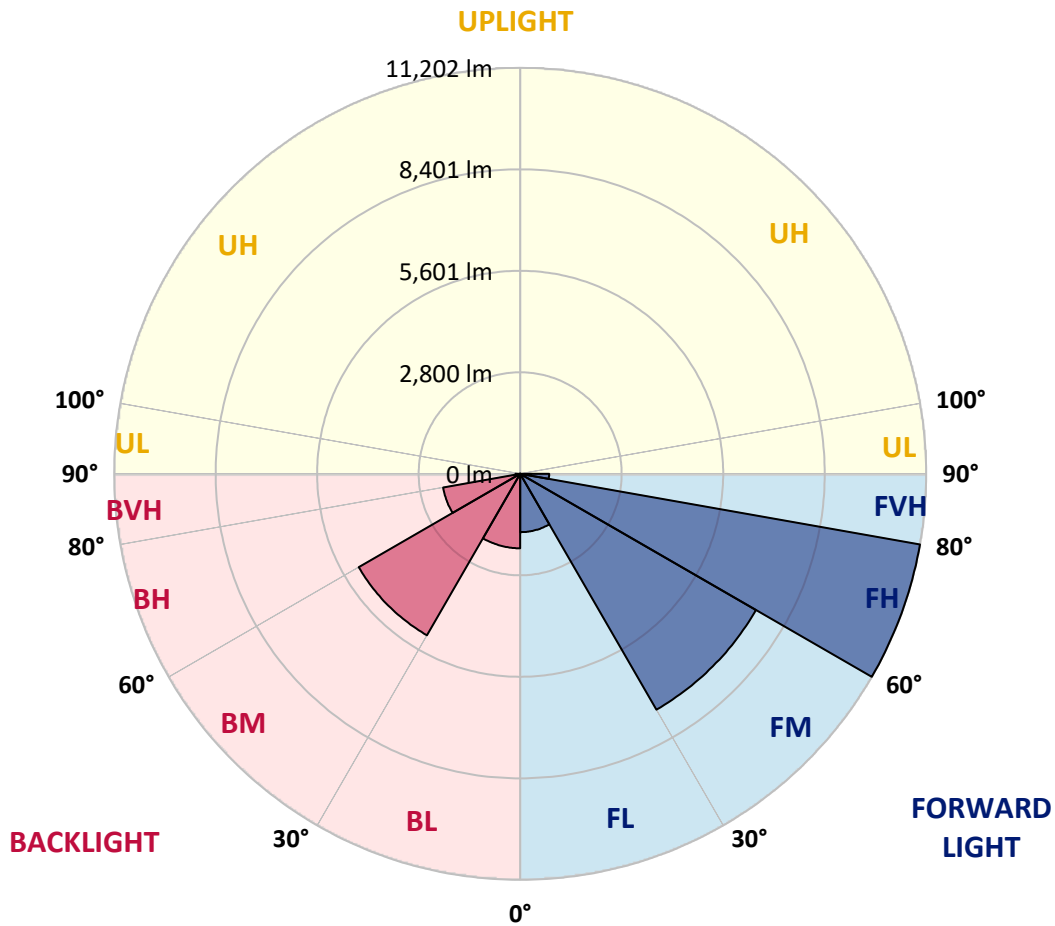
CATALOG NUMBER: NAV-SB5C-827-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1610.0	5.3			
FM (30°-60°)	7513.3	24.5			
FH (60°-80°)	11201.7	36.6			G4/12000
FVH (80°-90°)	798.9	2.6			G5
BL (0°-30°)	2054.1	6.7	B3/2500		
BM (30°-60°)	5143.7	16.8	B4/8500		
BH (60°-80°)	2157.7	7.0	B3/2500		G3/2500
BVH (80°-90°)	127.6	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium



REPORT NUMBER: P884654

CATALOG NUMBER: NAV-SB5C-827-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0
2.5°	3446.4	3465.9	3461.0	3454.5	3454.5	3456.1	3454.5	3465.9	3477.2	3488.6	3506.4
5°	3482.1	3501.6	3491.8	3483.7	3477.2	3475.6	3470.7	3469.1	3475.6	3490.2	3514.6
7.5°	3551.9	3571.4	3556.8	3542.2	3529.2	3522.7	3516.2	3506.4	3501.6	3509.7	3543.8
10°	3629.8	3649.3	3631.4	3605.5	3584.4	3576.2	3569.8	3560.0	3553.5	3558.4	3595.7
12.5°	3707.7	3727.2	3702.9	3667.2	3639.6	3634.7	3626.6	3623.3	3621.7	3620.1	3657.4
15°	3780.8	3797.0	3766.2	3724.0	3694.8	3686.6	3678.5	3683.4	3691.5	3701.2	3743.5
17.5°	3837.6	3853.8	3808.4	3753.2	3725.6	3722.4	3717.5	3733.7	3756.4	3780.8	3832.7
20°	3889.6	3905.8	3847.3	3772.7	3740.2	3740.2	3741.8	3775.9	3808.4	3844.1	3915.5
22.5°	3962.6	3975.6	3904.2	3801.9	3754.8	3758.1	3771.1	3805.1	3845.7	3894.4	3993.5
25°	4071.4	4081.1	3993.5	3857.1	3803.5	3813.3	3824.6	3840.9	3879.8	3936.6	4069.7
27.5°	4246.7	4254.8	4139.6	3954.5	3873.3	3889.6	3905.8	3894.4	3912.3	3961.0	4131.4
30°	4493.4	4498.3	4352.2	4107.1	3991.8	3999.9	4003.2	3956.1	3922.0	3961.0	4175.3
32.5°	4785.6	4784.0	4610.3	4292.1	4126.6	4118.4	4090.9	3998.3	3918.8	3952.9	4214.2
35°	5238.6	5220.7	4996.7	4551.9	4279.2	4228.8	4163.9	4045.4	3935.0	3944.8	4248.3
37.5°	5988.6	5933.4	5623.3	4977.2	4506.4	4378.2	4282.4	4121.7	3970.7	3941.5	4288.9
40°	6834.3	6764.5	6423.6	5560.0	4847.3	4641.2	4487.0	4230.5	4029.2	3956.1	4349.0
42.5°	7837.6	7738.5	7371.7	6246.7	5279.1	4980.5	4748.3	4368.4	4115.2	4003.2	4430.1
45°	9069.7	8938.2	8418.7	7021.0	5823.0	5425.2	5115.2	4577.9	4246.7	4094.1	4551.9
47.5°	10314.8	10347.3	9608.6	7907.4	6475.6	5973.9	5574.6	4892.8	4438.2	4240.2	4748.3
50°	11637.8	11660.6	10792.1	8889.5	7215.8	6594.1	6090.8	5245.1	4704.5	4448.0	5042.1
52.5°	12670.3	12673.5	11866.7	9917.1	7986.9	7275.9	6647.6	5647.6	5012.9	4724.0	5433.4
55°	13316.4	13308.3	12620.0	10889.5	8873.3	7991.8	7264.5	6105.4	5389.5	5048.6	5925.2
57.5°	13785.5	13761.2	13139.4	11725.5	9818.0	8837.5	7962.6	6624.9	5834.3	5435.0	6573.0
60°	13964.1	13949.5	13491.7	12447.9	10811.5	9772.6	8767.7	7206.1	6339.2	5891.2	7405.7
62.5°	14032.3	14059.9	13837.5	13147.5	11874.8	10808.3	9652.5	7900.9	6907.4	6407.4	8284.0
65°	14272.5	14322.9	14277.4	14063.1	13076.1	12020.9	10826.1	8727.2	7527.5	6960.9	9201.2
67.5°	14748.2	14798.5	14818.0	15158.9	14543.6	13532.3	12290.4	9756.4	8253.1	7535.6	9891.1
70°	14736.8	14722.2	15066.3	16030.6	16381.3	15624.8	14264.4	11022.6	9118.4	8012.9	9978.8
72.5°	13413.8	13296.9	14110.2	16020.9	17910.5	17809.8	16675.1	12655.7	9865.1	8071.3	8659.0
75°	10063.2	9751.5	11188.2	14438.1	18165.3	19050.1	18207.5	13668.6	9688.2	7131.4	6025.9
77.5°	4303.5	3990.2	5683.4	10688.2	16257.9	17808.2	16801.7	11925.2	7733.7	4715.8	2959.4
80°	1126.6	1125.0	1717.5	4845.7	11056.7	13150.8	11537.2	7701.2	4418.8	1685.0	816.5
82.5°	465.9	454.5	631.5	1884.7	5402.5	7379.8	6022.6	3435.0	1595.8	456.2	271.1
85°	173.7	172.1	306.8	651.0	1905.8	3043.8	2202.9	878.2	397.7	222.4	121.8
87.5°	48.7	47.1	66.6	225.6	464.3	704.5	376.6	144.5	112.0	87.7	35.7
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: P884654
 CATALOG NUMBER: NAV-SB5C-827-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0	3500.0
2.5°	3511.3	3519.4	3534.0	3545.4	3560.0	3576.2	3599.0	3613.6	3628.2	3637.9	3631.4
5°	3525.9	3543.8	3581.1	3618.5	3662.3	3702.9	3749.9	3784.0	3811.6	3819.8	3823.0
7.5°	3558.4	3587.6	3650.9	3714.2	3784.0	3850.6	3918.8	3977.2	4024.3	4042.2	4043.8
10°	3615.2	3654.2	3743.5	3832.7	3925.3	4027.5	4115.2	4199.6	4266.2	4293.8	4295.4
12.5°	3686.6	3735.3	3852.2	3975.6	4103.8	4245.1	4358.7	4462.6	4545.4	4582.7	4582.7
15°	3779.2	3842.5	3991.8	4157.4	4345.7	4542.1	4686.6	4801.9	4894.4	4939.9	4936.6
17.5°	3879.8	3964.2	4152.5	4402.5	4672.0	4930.1	5099.0	5183.4	5279.1	5323.0	5321.4
20°	3977.2	4081.1	4350.6	4714.2	5073.0	5347.3	5483.7	5506.4	5512.9	5517.8	5530.8
22.5°	4077.9	4217.5	4599.0	5107.1	5491.8	5681.7	5701.2	5603.8	5467.5	5404.1	5422.0
25°	4188.3	4373.3	4923.6	5540.5	5852.2	5874.9	5725.6	5488.6	5230.4	5111.9	5129.8
27.5°	4295.4	4553.5	5313.2	5954.5	6111.9	5912.3	5590.8	5254.8	4943.1	4818.1	4832.7
30°	4402.5	4759.7	5743.4	6316.5	6230.4	5819.7	5378.2	5003.2	4689.9	4558.4	4573.0
32.5°	4511.3	4999.9	6238.5	6577.8	6209.3	5623.3	5113.6	4720.7	4444.7	4306.8	4324.6
35°	4634.7	5295.4	6707.7	6720.7	6068.1	5334.3	4764.5	4383.1	4142.8	4032.4	4056.8
37.5°	4795.4	5670.4	7121.7	6756.4	5821.3	4910.6	4331.1	3983.7	3785.7	3735.3	3771.1
40°	4995.1	6121.7	7438.2	6699.6	5456.1	4396.0	3857.1	3579.5	3467.5	3478.8	3517.8
42.5°	5254.8	6626.5	7660.6	6553.5	4948.0	3865.2	3441.5	3318.1	3371.7	3417.2	3459.4
45°	5592.5	7150.9	7798.6	6305.1	4373.3	3415.5	3196.4	3225.6	3266.2	3271.1	3303.5
47.5°	6024.3	7681.7	7889.5	5930.1	3787.3	3099.0	3040.5	3047.0	3038.9	3004.8	3030.8
50°	6563.2	8197.9	7970.7	5433.4	3288.9	2900.9	2823.0	2800.3	2688.3	2577.9	2592.5
52.5°	7176.8	8672.0	8004.8	4816.5	2900.9	2735.4	2608.7	2465.9	2256.5	2222.4	2233.7
55°	7858.7	9110.3	7917.1	4058.4	2574.6	2522.7	2331.1	2159.1	2136.3	2107.1	2112.0
57.5°	8673.6	9582.7	7738.5	3212.6	2240.2	2274.3	2087.6	2107.1	2066.5	2021.1	2013.0
60°	9564.8	10071.3	7425.2	2441.5	1894.5	1964.3	2024.3	2022.7	2011.3	1974.0	1961.0
62.5°	10366.7	10392.7	6808.3	1870.1	1590.9	1724.0	1888.0	1886.3	1876.6	1855.5	1847.4
65°	10844.0	10344.0	5779.1	1472.4	1340.9	1526.0	1702.9	1715.9	1717.5	1715.9	1715.9
67.5°	10759.6	9774.2	4366.8	1172.1	1134.7	1324.7	1519.5	1537.3	1550.3	1553.5	1556.8
70°	9805.1	8522.6	2847.4	935.1	951.3	1147.7	1345.8	1363.6	1375.0	1388.0	1394.5
72.5°	7642.8	6266.1	1629.8	756.5	790.6	995.1	1173.7	1194.8	1201.3	1225.6	1235.4
75°	4657.4	3685.0	879.9	595.8	649.3	850.6	1003.2	1027.6	1038.9	1068.2	1071.4
77.5°	2214.3	1595.8	501.6	464.3	522.7	694.8	847.4	875.0	844.1	860.4	847.4
80°	748.4	592.5	316.6	353.9	399.3	542.2	678.6	706.2	641.2	638.0	631.5
82.5°	261.4	240.3	201.3	235.4	258.1	388.0	513.0	548.7	477.3	475.6	452.9
85°	102.3	97.4	112.0	128.2	154.2	238.6	337.7	355.5	293.8	237.0	233.8
87.5°	21.1	22.7	27.6	29.2	47.1	82.8	121.8	149.3	118.5	100.6	92.5
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)