

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: P969300

Luminaire Tested: **NAV-SB5D-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52369.3 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 364.9
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

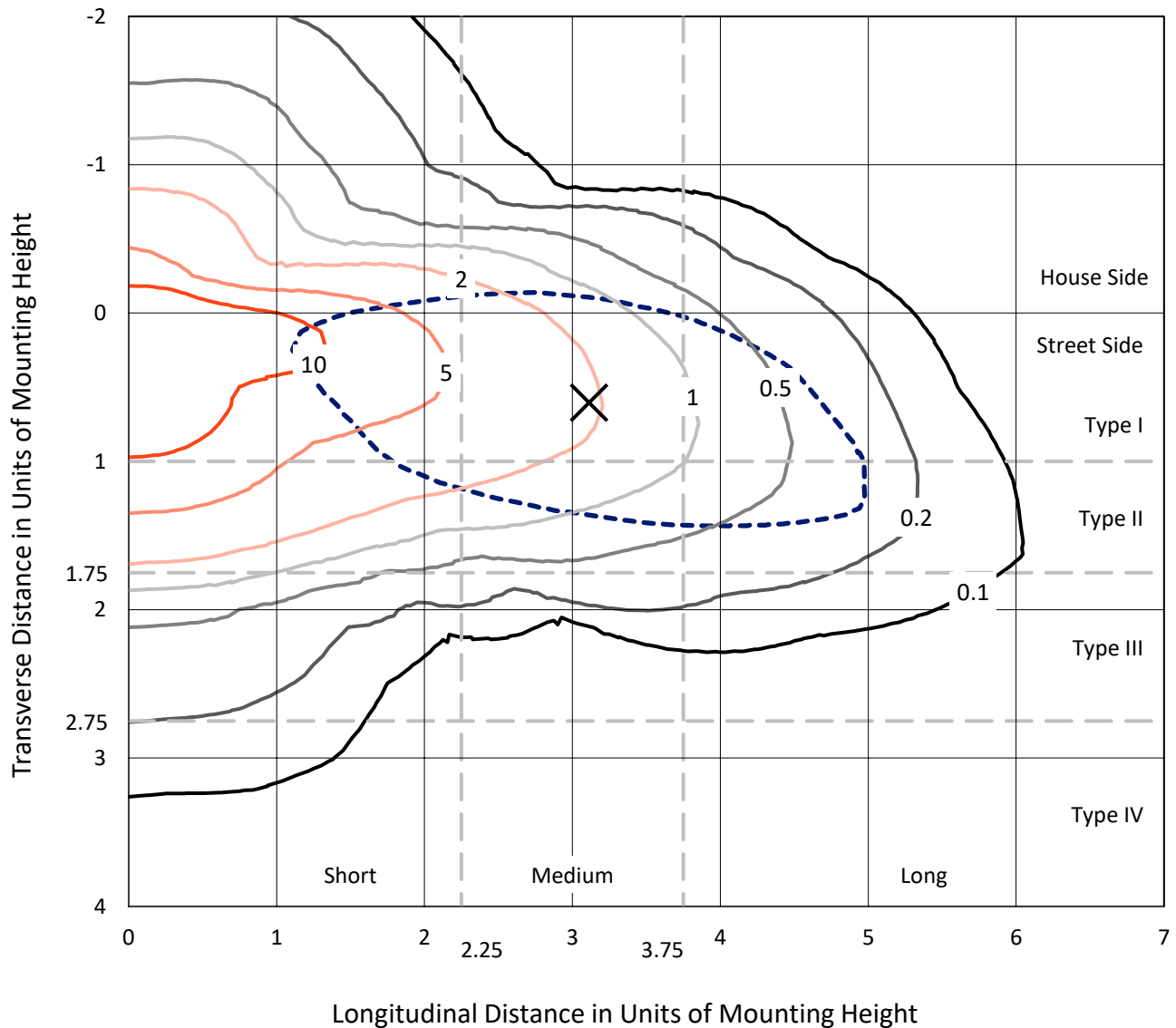


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Iso-Footcandle Lines of Horizontal Illumination

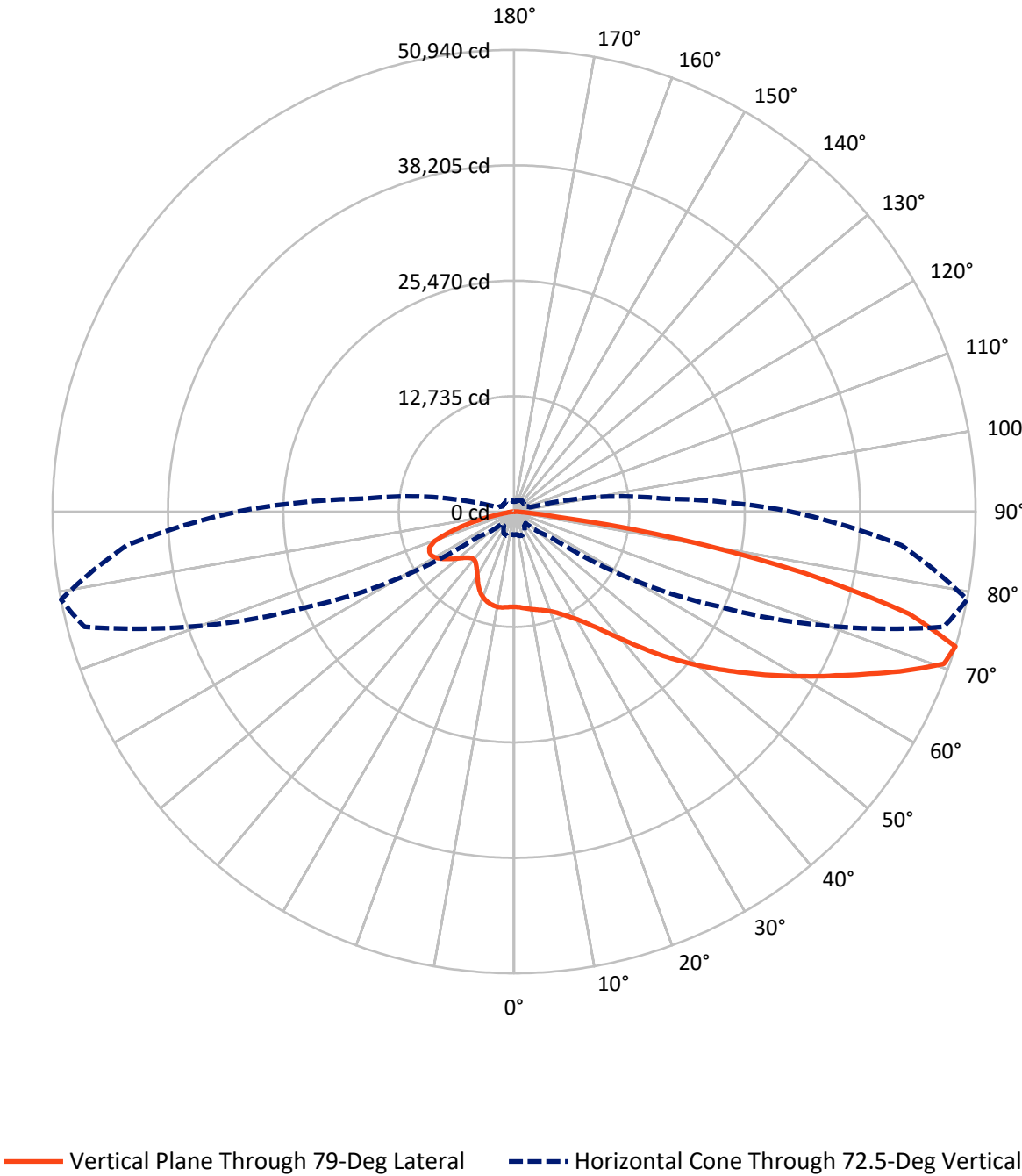
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11524.1	0.0	11524.1
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	40845.2	0.0	40845.2
	% Fixture	78.0	0.0	78.0
Total	Lumens	52369.3	0.0	52369.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	954.2	1.8
10°-20°	2494.9	4.8
20°-30°	4025.7	7.7
30°-40°	6042.0	11.5
40°-50°	8570.9	16.4
50°-60°	10823.9	20.7
60°-70°	10993.2	21.0
70°-80°	7492.4	14.3
80°-90°	972.1	1.9
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°	52369.3	100.0
0°-180°	52369.3	100.0

Coefficient of Utilization



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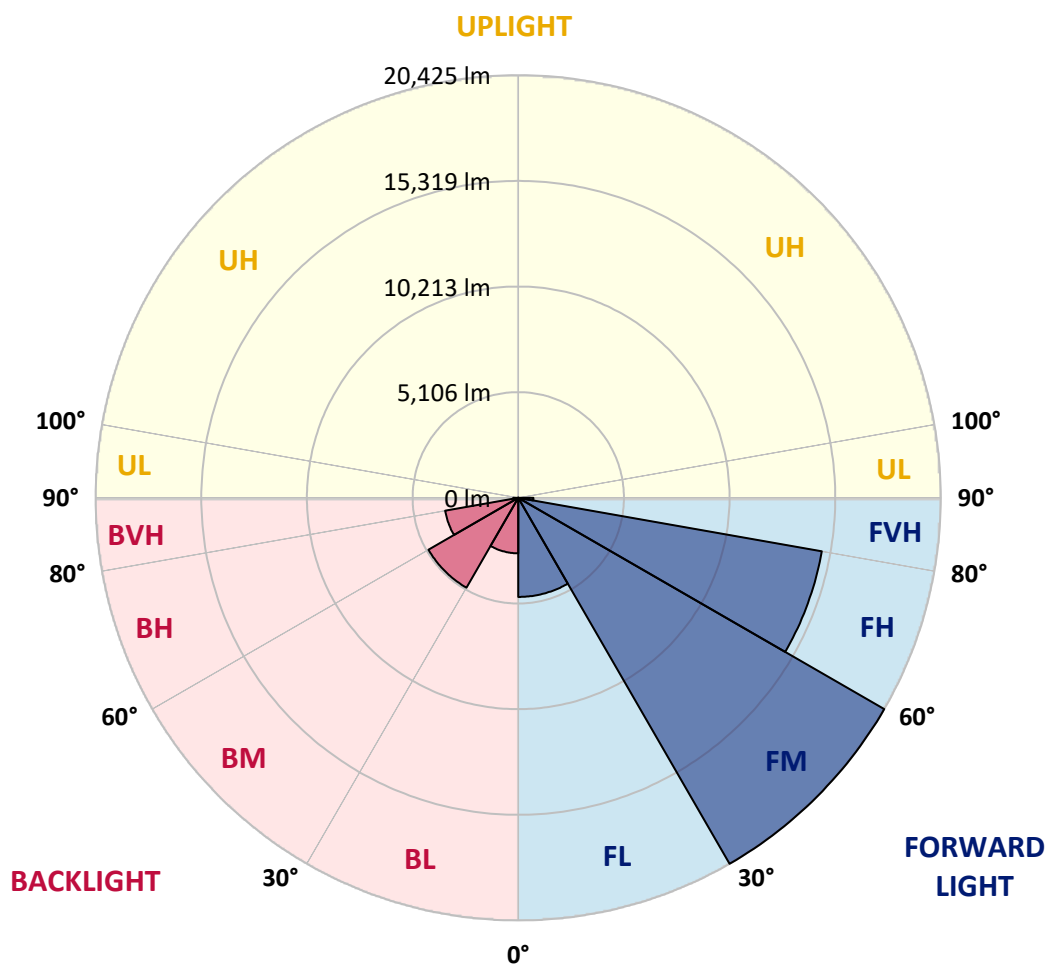
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4790.5	9.1			
FM	(30°-60°)	20425.1	39.0			
FH	(60°-80°)	14897.3	28.4			G5
FVH	(80°-90°)	732.3	1.4			G4/750
BL	(0°-30°)	2684.3	5.1	B4/5000		
BM	(30°-60°)	5011.8	9.6	B4/8500		
BH	(60°-80°)	3588.2	6.9	B4/5000		G4/5000
BVH	(80°-90°)	239.8	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6
2.5°	10518.1	10468.3	10498.8	10487.7	10501.5	10518.1	10523.7	10532.1	10559.8	10557.0	10554.2
5°	10496.0	10446.2	10487.7	10473.9	10509.8	10548.7	10581.9	10612.3	10656.7	10676.1	10648.4
7.5°	10449.0	10415.6	10457.3	10498.8	10565.3	10623.4	10670.6	10739.7	10803.5	10814.6	10833.9
10°	10174.7	10149.8	10246.7	10354.8	10537.6	10695.5	10798.0	10878.3	10947.5	10958.6	10986.4
12.5°	9889.4	9858.9	9966.9	10113.8	10410.1	10695.5	10911.5	11016.8	11077.8	11113.8	11155.3
15°	9842.3	9817.3	9878.2	10005.7	10252.3	10620.6	10989.1	11183.1	11235.6	11277.2	11293.9
17.5°	10069.4	10022.3	10047.3	10091.5	10235.6	10551.5	11050.0	11371.3	11451.7	11496.0	11496.0
20°	10595.7	10529.2	10490.5	10401.8	10376.9	10562.5	11044.5	11598.5	11703.8	11759.2	11773.0
22.5°	11296.6	11252.2	11169.1	10944.7	10701.0	10698.2	11149.7	11889.4	12086.1	12138.7	12105.5
25°	12144.2	12077.8	11972.5	11667.8	11199.7	10967.0	11327.1	12260.6	12590.3	12604.1	12507.2
27.5°	13119.3	13019.7	12875.5	12473.8	11842.3	11388.0	11598.5	12687.1	13169.2	13163.7	12964.2
30°	14147.0	14047.3	13895.0	13407.4	12612.4	11955.9	11975.3	13147.1	13856.2	13825.7	13485.0
32.5°	14897.8	14822.9	14792.5	14415.7	13498.8	12626.3	12407.4	13656.7	14703.8	14676.2	14199.6
35°	15473.9	15376.9	15413.0	15221.9	14465.6	13377.0	12936.5	14263.4	15734.4	15731.6	15138.7
37.5°	16044.6	15958.7	15989.2	15861.8	15360.3	14329.9	13582.0	15005.8	17011.4	17072.3	16274.5
40°	16565.3	16474.0	16595.9	16476.8	16055.7	15343.7	14316.1	15845.2	18490.6	18606.9	17648.4
42.5°	16878.4	16806.4	17008.5	17011.4	16659.5	16199.7	15122.1	16770.3	20202.5	20462.9	19338.3
45°	16986.4	16961.5	17266.2	17329.9	17194.2	16695.6	15847.9	17778.7	22047.4	22512.8	21263.5
47.5°	16870.1	16823.0	17244.1	17479.5	17587.6	16928.3	16449.0	18870.1	23931.2	24612.6	23363.2
50°	16282.8	16191.4	16817.5	17313.3	17698.4	17080.6	17055.7	20130.5	26072.4	26817.6	25474.1
52.5°	15227.4	15158.1	15870.1	16731.6	17454.6	17155.4	17737.1	21507.3	28105.7	29069.7	27637.6
55°	13878.3	13787.0	14570.9	15695.5	16847.9	17130.5	18418.6	23047.4	30504.6	31482.5	29873.1
57.5°	11739.8	11557.0	12548.7	13878.3	15859.0	17100.0	19127.7	24579.4	32942.4	34114.2	32258.2
60°	8620.7	8349.1	9565.3	11141.4	13925.4	16803.6	20005.8	26296.8	35867.6	36923.1	34862.1
62.5°	5019.4	4861.6	5656.6	7127.5	10496.0	15058.4	20499.0	28294.1	38743.1	39851.1	37421.6
65°	3897.6	3853.3	3922.5	4036.0	5842.2	11274.4	18978.2	30241.5	42399.6	43175.3	40089.3
67.5°	3565.2	3531.9	3562.4	3349.1	2964.0	6279.9	15014.1	30734.6	46316.6	46787.5	42424.5
70°	3169.0	3130.2	3230.0	3047.1	2332.5	2856.0	9701.0	28945.1	49433.0	50316.6	44200.2
72.5°	2581.8	2537.4	2770.2	2687.0	1964.0	1833.8	4872.6	24693.0	49106.1	50939.9	42928.6
75°	1983.4	1958.5	2235.5	2304.7	1601.2	1443.2	2338.0	18354.9	43214.0	45061.7	36997.9
77.5°	1540.2	1520.8	1662.0	1914.2	1290.9	1119.1	1437.7	11642.9	32565.7	32889.8	25496.3
80°	1155.2	1099.7	1229.9	1482.0	1005.5	817.2	975.1	6789.6	20584.9	18659.6	11097.2
82.5°	723.0	695.3	803.3	988.9	709.2	562.3	634.4	3750.8	8249.4	4858.8	2141.3
85°	412.8	401.7	437.7	565.1	385.1	324.1	362.8	1656.5	1507.0	1036.1	645.4
87.5°	166.3	160.6	199.5	252.0	141.2	119.1	127.4	398.9	332.4	307.5	213.3
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°	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6	10512.6
2.5°	10543.2	10543.2	10504.3	10443.4	10374.1	10329.8	10257.8	10238.4	10163.6	10141.5	10177.4
5°	10670.6	10648.4	10529.2	10357.5	10122.1	9906.0	9667.8	9518.2	9307.6	9232.8	9288.2
7.5°	10831.2	10770.3	10565.3	10188.5	9695.5	9210.6	8706.6	8324.2	7958.6	7828.3	7845.0
10°	10978.1	10892.2	10543.2	9883.9	9030.7	8191.3	7387.9	6825.6	6399.0	6224.5	6263.3
12.5°	11124.8	10967.0	10396.3	9376.9	8086.0	6947.4	6091.5	5653.8	5390.7	5180.1	5249.4
15°	11263.3	11041.7	10169.1	8698.3	7050.0	5894.9	5263.3	4914.2	4703.7	4565.1	4590.1
17.5°	11424.0	11105.5	9828.4	7836.7	6063.8	5166.3	4651.0	4440.5	4399.0	4382.4	4393.5
20°	11648.4	11163.6	9379.7	6872.7	5338.0	4584.5	4318.6	4299.3	4296.5	4288.2	4315.9
22.5°	11889.4	11232.9	8786.8	5997.4	4720.3	4221.7	4174.6	4135.8	4110.9	4108.1	4138.5
25°	12174.7	11255.0	8044.4	5279.9	4194.0	4049.9	3994.5	3936.3	3919.7	3919.7	3936.3
27.5°	12451.7	11180.3	7180.1	4656.6	3897.6	3892.0	3820.0	3800.6	3797.8	3806.1	3828.3
30°	12728.8	11038.9	6321.5	4080.4	3725.8	3725.8	3700.9	3714.7	3725.8	3753.6	3772.9
32.5°	13102.7	10889.4	5604.0	3653.8	3576.2	3548.6	3573.5	3601.1	3612.2	3648.3	3678.7
35°	13651.2	10784.1	5033.4	3421.1	3421.1	3385.1	3398.9	3393.4	3368.5	3351.9	3390.6
37.5°	14377.0	10778.6	4562.4	3313.1	3290.9	3285.3	3288.1	3252.1	3155.2	3038.8	3041.6
40°	15249.5	10928.1	4199.5	3238.3	3221.7	3254.9	3238.3	3141.3	2875.4	2673.2	2667.7
42.5°	16421.3	11354.7	3966.9	3146.9	3196.8	3238.3	3171.8	2836.6	2656.6	2520.8	2515.2
45°	17800.9	12047.3	3847.7	3049.9	3149.6	3199.5	2878.2	2731.3	2587.3	2423.8	2412.7
47.5°	19363.2	12919.9	3820.0	2958.5	3044.4	3074.8	2753.5	2687.0	2523.5	2346.3	2332.5
50°	21064.1	13953.1	3894.8	2850.4	2892.0	2786.8	2711.9	2651.1	2482.0	2307.5	2288.1
52.5°	22823.1	15091.7	4044.3	2703.6	2739.6	2623.3	2695.3	2642.7	2457.1	2221.7	2205.0
55°	24551.6	16238.5	4188.5	2531.9	2584.5	2476.5	2648.3	2609.4	2343.6	2077.6	2063.7
57.5°	26308.0	17379.8	4329.7	2379.5	2435.0	2335.3	2573.5	2520.8	2216.2	1944.6	1939.1
60°	28133.4	18487.8	4396.2	2232.8	2271.5	2205.0	2459.9	2368.5	2072.0	1808.9	1800.6
62.5°	29842.6	19410.3	4288.2	2085.9	2110.9	2083.1	2310.2	2188.4	1928.0	1656.5	1653.7
65°	31557.3	19958.8	3955.8	1941.9	1947.4	1933.6	2099.7	1994.4	1759.0	1523.6	1507.0
67.5°	33111.4	20266.3	3426.7	1786.8	1772.8	1767.3	1903.1	1784.0	1595.6	1390.6	1374.0
70°	33441.0	19485.0	2617.7	1603.9	1603.9	1590.1	1687.0	1565.1	1415.5	1249.4	1243.8
72.5°	30543.5	16390.9	1858.7	1396.2	1418.3	1390.6	1471.0	1368.5	1232.7	1121.9	1088.7
75°	24629.2	12019.6	1351.9	1182.8	1221.6	1174.5	1249.4	1177.3	1061.0	1058.2	952.9
77.5°	16922.8	7432.3	980.6	975.1	1002.8	941.9	1027.8	988.9	883.7	836.6	783.9
80°	7221.7	2964.0	714.7	753.5	753.5	698.0	797.8	808.8	717.5	695.3	695.3
82.5°	1437.7	842.1	501.4	518.0	487.6	470.9	565.1	626.1	864.3	961.2	964.0
85°	432.1	310.3	302.0	282.6	249.3	252.0	332.4	628.8	775.6	443.2	382.3
87.5°	119.1	77.6	80.4	63.8	52.6	69.3	113.6	476.4	260.3	110.8	94.2
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)