

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: P969346

Luminaire Tested: **NAV-SB5D-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969346
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55233.2 lumens
Efficiency: N/A
Efficacy: 151.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

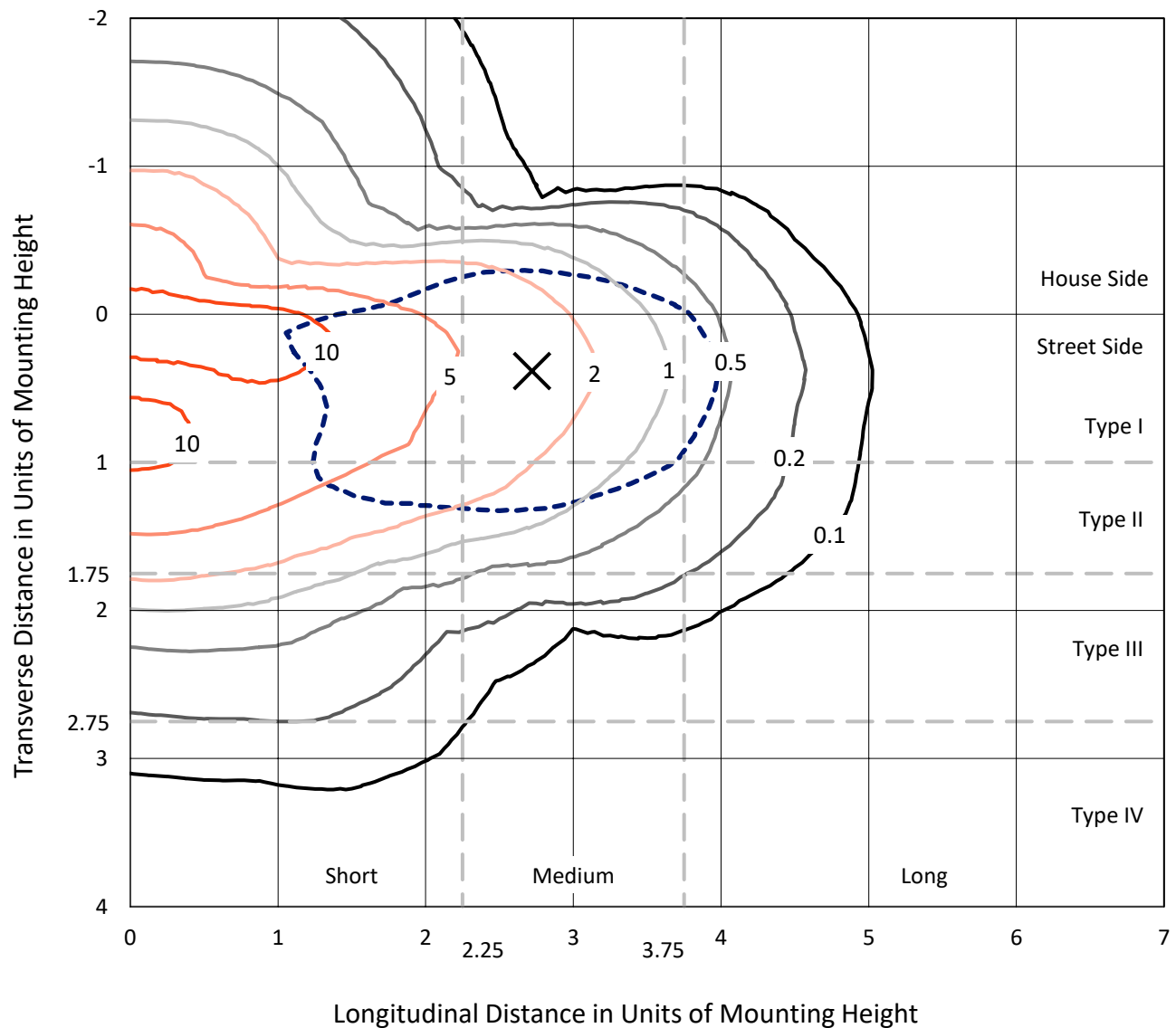
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

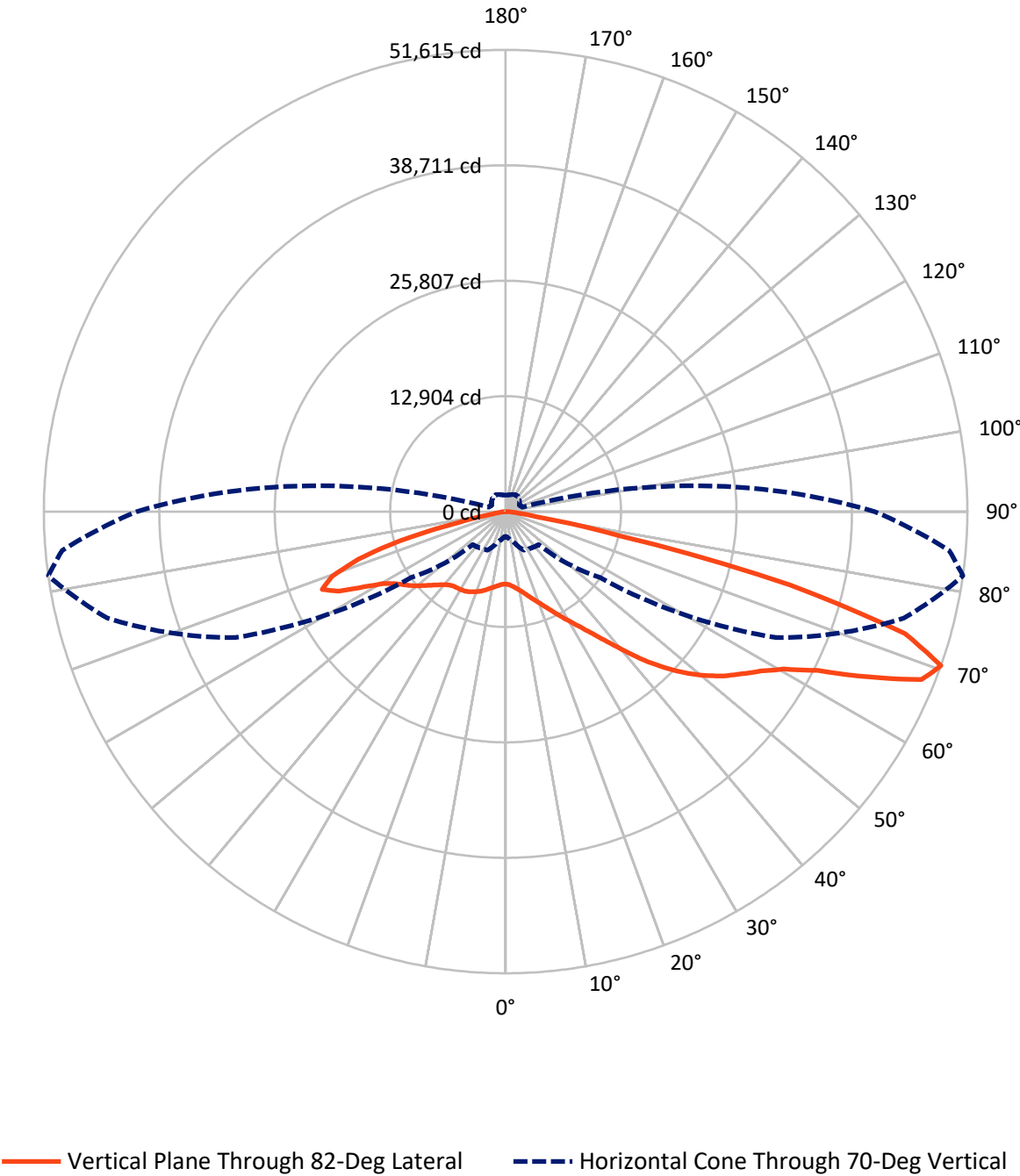
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.7 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	13616.3	0.0	13616.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	41616.8	0.0	41616.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	55233.2	0.0	55233.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	764.6	1.4
10°-20°	2196.7	4.0
20°-30°	3674.8	6.7
30°-40°	5741.1	10.4
40°-50°	9143.3	16.6
50°-60°	12724.0	23.0
60°-70°	13309.9	24.1
70°-80°	6956.5	12.6
80°-90°	722.4	1.3
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°	55233.2	100.0
0°-180°	55233.2	100.0

Coefficient of Utilization



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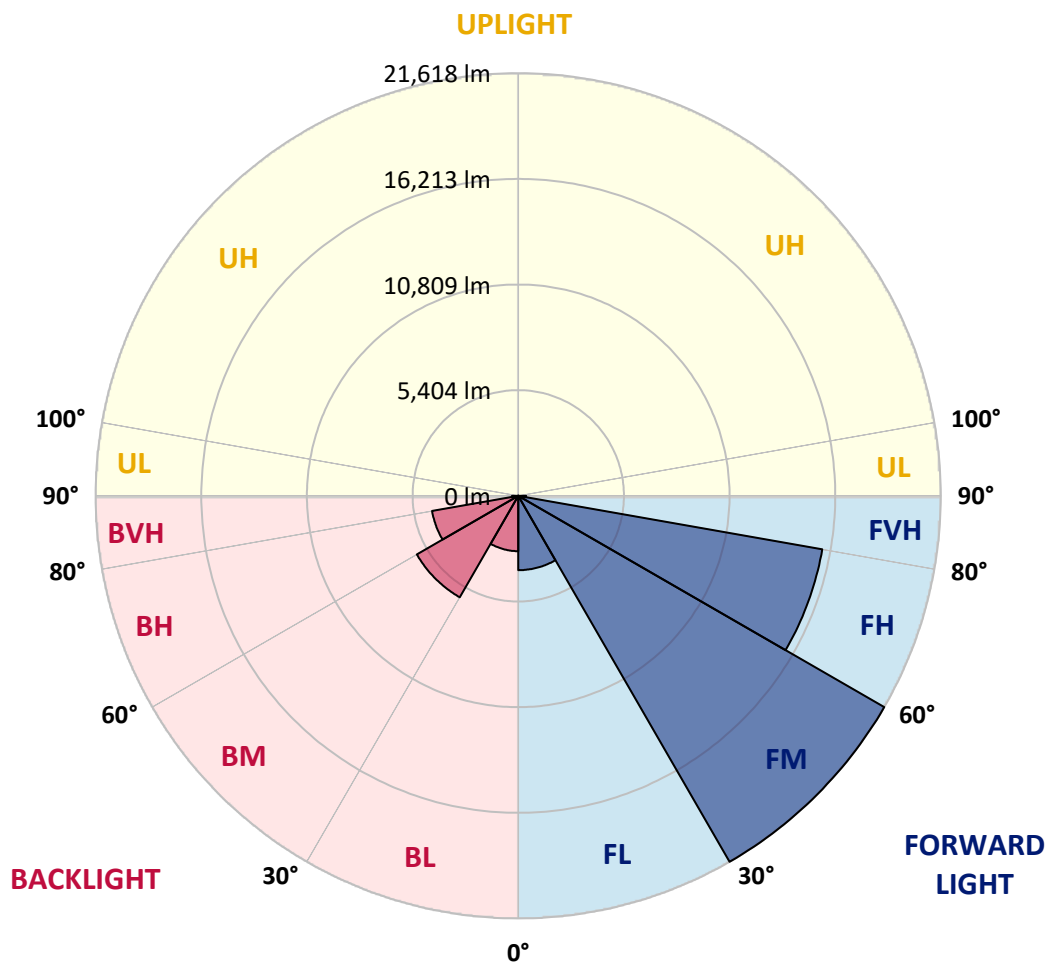
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3803.4	6.9			
FM	(30°-60°)	21617.7	39.1			
FH	(60°-80°)	15791.3	28.6			G5
FVH	(80°-90°)	404.4	0.7			G3/500
BL	(0°-30°)	2832.7	5.1	B4/5000		
BM	(30°-60°)	5990.6	10.8	B4/8500		
BH	(60°-80°)	4475.0	8.1	B4/5000		G4/5000
BVH	(80°-90°)	318.0	0.6			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°	82°	85°
0°	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9
2.5°	8291.3	8338.2	8323.5	8308.9	8308.9	8288.4	8285.5	8256.2	8232.7	8194.6	8185.8
5°	8396.8	8446.6	8440.8	8452.5	8490.6	8499.4	8508.2	8490.6	8443.7	8396.8	8376.3
7.5°	8303.0	8358.7	8376.3	8446.6	8563.9	8669.3	8748.5	8780.8	8736.8	8669.3	8637.2
10°	7986.5	8048.1	8109.6	8276.7	8484.7	8733.8	8944.9	9070.9	9062.1	8997.7	8942.0
12.5°	7344.6	7409.1	7541.0	7866.4	8247.4	8687.0	9079.7	9343.5	9434.3	9387.5	9290.7
15°	6831.7	6887.5	6987.1	7321.2	7816.5	8484.7	9129.5	9642.4	9873.9	9847.6	9730.3
17.5°	6817.1	6840.5	6902.0	7060.4	7441.4	8168.2	9076.8	9935.5	10378.0	10375.2	10228.6
20°	7075.1	7083.8	7118.9	7151.2	7368.1	7927.9	8942.0	10178.8	10943.7	10943.7	10785.5
22.5°	7432.6	7426.7	7461.9	7432.6	7538.1	7907.4	8856.9	10392.7	11573.8	11620.7	11421.5
25°	7969.0	7939.6	7930.8	7863.4	7883.9	8097.9	8950.7	10636.0	12321.2	12417.9	12168.8
27.5°	8684.0	8637.2	8604.9	8449.6	8396.8	8490.6	9237.9	10929.1	13153.5	13320.6	13004.1
30°	9616.0	9531.1	9484.1	9214.5	9024.0	9038.7	9671.7	11318.9	14024.0	14293.6	13892.1
32.5°	10888.1	10756.1	10630.1	10187.6	9838.8	9724.5	10231.6	11858.1	14967.8	15398.6	14882.7
35°	12312.4	12206.9	12072.0	11389.2	10852.8	10589.1	10987.7	12611.3	16072.6	16755.6	16084.4
37.5°	13684.1	13593.1	13657.6	12737.4	12045.7	11661.7	11978.3	13622.5	17435.5	18443.6	17590.8
40°	15102.6	15032.2	15041.0	14161.7	13355.7	12924.9	13180.0	14891.5	18997.7	20451.3	19402.0
42.5°	16644.2	16591.4	16415.6	15636.0	14730.4	14328.8	14563.3	16357.0	20674.0	22737.4	21389.2
45°	18370.5	18338.2	18174.1	17280.2	16242.7	15791.3	16107.8	17974.7	22359.2	24888.5	23385.1
47.5°	19862.2	19888.6	19868.1	19114.8	18039.2	17376.8	17754.9	19662.9	23927.3	26910.9	25298.8
50°	20580.3	20718.0	20920.2	20685.7	20017.5	19343.5	19416.7	21292.4	25421.9	28807.1	27133.6
52.5°	20205.1	20466.0	21016.9	21392.1	21650.0	21509.3	21312.9	22910.3	26828.8	30518.7	28868.6
55°	18807.1	19173.4	20087.8	20993.5	22309.4	23332.3	23590.2	24703.9	28200.4	32025.1	30509.8
57.5°	16260.2	16855.2	17675.8	19507.6	21723.2	24214.5	26245.5	27192.2	29654.1	33634.1	32227.3
60°	11893.3	12690.5	13710.4	16436.1	19671.7	23742.6	28505.2	31014.0	31720.4	35718.0	34463.6
62.5°	7611.3	8103.8	9041.6	11609.0	15328.3	21324.7	29196.9	35791.3	35222.7	39135.3	37816.5
65°	5211.0	5527.5	6386.3	7828.2	9909.1	15873.4	27344.6	39372.7	40785.4	44551.5	43549.2
67.5°	3786.7	4026.9	4759.7	6022.8	6456.6	9393.3	21219.1	39208.6	46192.8	50131.7	48572.6
70°	2760.8	2930.8	3546.3	4759.7	4967.8	5225.7	12854.6	33329.3	46075.5	51614.8	49747.9
72.5°	2045.7	2163.0	2576.2	3692.9	4021.1	3528.7	6362.8	24223.3	39592.5	46685.2	45187.4
75°	1480.1	1567.9	1872.8	2825.3	3218.1	2687.5	3174.1	14155.9	27617.2	32839.9	33103.7
77.5°	1131.3	1198.7	1398.0	2069.2	2576.2	2016.4	1969.5	6512.3	13094.9	13159.4	13898.0
80°	908.6	952.5	1061.0	1456.6	1975.4	1509.4	1283.7	2628.9	4138.3	3502.3	3675.2
82.5°	668.2	741.5	896.9	1022.8	1412.7	1040.5	782.5	1327.7	1573.9	1354.0	1365.8
85°	381.0	430.8	542.2	732.7	902.7	636.0	448.4	589.1	732.7	600.9	536.4
87.5°	134.8	175.9	190.5	287.2	392.8	263.7	172.9	169.9	240.4	178.8	149.4
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°	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9	8097.9
2.5°	8156.4	8141.9	8083.3	8004.1	7922.0	7842.9	7816.5	7760.8	7722.8	7702.3	7725.6
5°	8320.6	8273.7	8135.9	7960.2	7775.4	7576.2	7435.6	7306.5	7212.7	7124.9	7160.0
7.5°	8555.1	8473.1	8235.7	7927.9	7599.7	7268.5	7022.3	6834.7	6708.6	6626.6	6644.2
10°	8827.6	8701.6	8338.2	7878.0	7371.0	6896.2	6606.1	6444.9	6365.8	6321.8	6333.5
12.5°	9141.3	8962.5	8443.7	7763.8	7022.3	6480.0	6280.8	6233.8	6236.8	6239.7	6245.6
15°	9528.1	9279.0	8528.7	7514.7	6568.0	6160.6	6125.4	6201.7	6280.8	6318.8	6315.9
17.5°	9964.8	9613.1	8543.4	7104.3	6122.5	5955.5	6066.8	6231.0	6351.1	6403.9	6415.6
20°	10433.8	9953.1	8437.8	6524.0	5756.1	5788.4	5987.6	6198.7	6330.6	6397.9	6415.6
22.5°	10970.1	10316.5	8185.8	5914.5	5457.2	5606.6	5841.2	6046.3	6184.0	6251.5	6269.0
25°	11582.6	10723.9	7790.1	5401.5	5199.3	5401.5	5636.0	5806.0	5917.3	5978.9	5996.5
27.5°	12262.6	11148.8	7262.5	4994.1	4973.6	5190.5	5383.9	5515.8	5574.5	5621.3	5638.9
30°	12945.4	11535.8	6623.7	4686.4	4777.2	4982.4	5120.2	5178.8	5196.3	5205.2	5225.7
32.5°	13684.1	11869.8	5952.5	4431.4	4589.6	4780.2	4862.2	4888.6	4806.5	4750.9	4768.4
35°	14578.0	12227.4	5296.0	4229.2	4405.0	4569.1	4595.5	4572.1	4475.4	4361.1	4366.9
37.5°	15682.8	12672.9	4771.4	4085.5	4232.1	4340.6	4308.3	4302.4	4311.3	4176.5	4185.2
40°	17036.9	13253.1	4387.4	3974.2	4091.4	4114.9	4024.0	4073.9	4117.8	3912.6	3918.5
42.5°	18540.4	13953.6	4144.2	3898.0	3974.2	3918.5	3777.8	3833.5	3827.7	3558.0	3555.1
45°	20073.2	14715.7	4059.2	3842.3	3865.8	3754.4	3599.1	3613.7	3490.6	3247.4	3256.1
47.5°	21597.3	15533.4	4112.0	3795.4	3730.9	3604.9	3484.8	3420.3	3238.6	3056.9	3056.9
50°	23092.0	16392.1	4305.4	3701.6	3546.3	3473.0	3385.1	3270.8	3077.4	2922.1	2910.3
52.5°	24478.2	17256.7	4522.3	3546.3	3314.7	3358.7	3303.1	3171.1	2980.7	2822.3	2825.3
55°	25791.3	18121.3	4607.3	3332.4	3097.9	3259.1	3226.8	2983.6	2755.0	2626.0	2614.3
57.5°	27221.5	19161.8	4513.5	3059.8	2922.1	3144.8	3021.7	2752.0	2620.2	2523.4	2514.6
60°	29202.8	20794.2	4311.3	2722.7	2755.0	2974.8	2763.8	2652.4	2508.8	2400.3	2394.5
62.5°	32494.0	23839.3	3985.9	2388.7	2558.6	2722.7	2640.7	2529.3	2382.7	2277.2	2277.2
65°	37359.2	28071.5	3373.4	2127.8	2338.8	2476.5	2508.8	2397.4	2245.1	2133.6	2139.5
67.5°	41462.4	30726.7	2552.8	1910.9	2113.1	2277.2	2368.1	2259.7	2098.5	1990.0	1993.0
70°	41236.7	28798.3	1949.0	1697.0	1913.9	2080.9	2198.1	2113.1	1940.2	1837.6	1846.4
72.5°	36626.5	24091.4	1576.8	1480.1	1711.6	1875.7	2016.4	1951.9	1776.1	1676.4	1676.4
75°	26907.9	17101.4	1260.2	1260.2	1459.6	1661.7	1817.1	1776.1	1614.9	1544.6	1524.1
77.5°	11342.3	7174.7	987.7	1046.3	1213.4	1427.3	1620.7	1635.4	1494.8	1582.6	1436.1
80°	3015.9	1978.4	753.3	823.6	952.5	1178.2	1409.7	1403.8	1251.4	1169.4	1087.3
82.5°	1148.9	779.6	536.4	580.3	688.7	902.7	1116.6	1151.8	999.4	864.6	864.6
85°	442.6	334.2	331.2	348.8	401.5	597.9	844.1	873.4	753.3	638.9	659.5
87.5°	114.3	99.6	123.1	117.3	184.6	319.5	483.6	501.1	460.1	266.7	381.0
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)