

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: P968387

Luminaire Tested: **NAV-SB5B-827-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968387
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-827-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21107.8 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 182.7
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

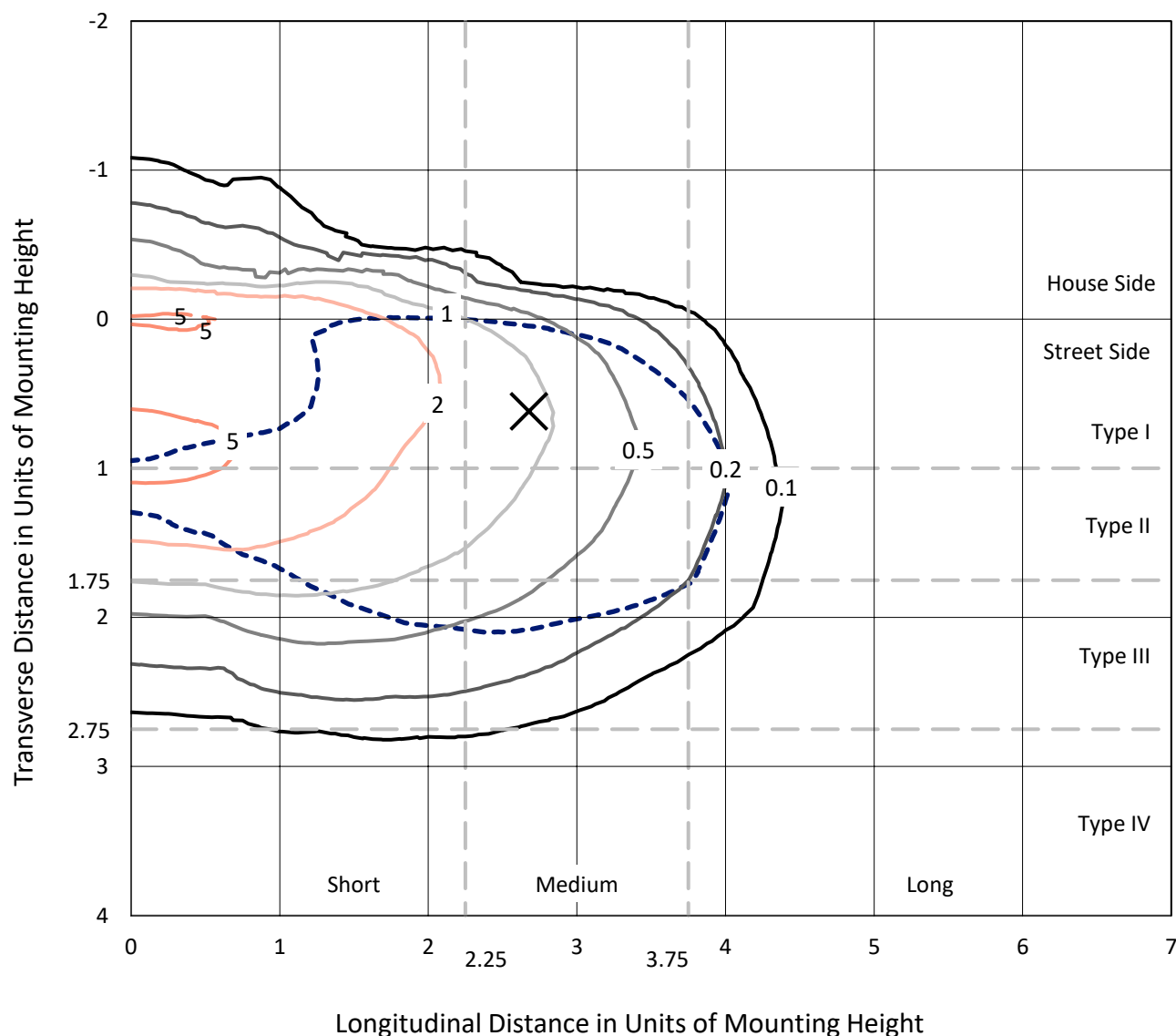


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Iso-Footcandle Lines of Horizontal Illumination

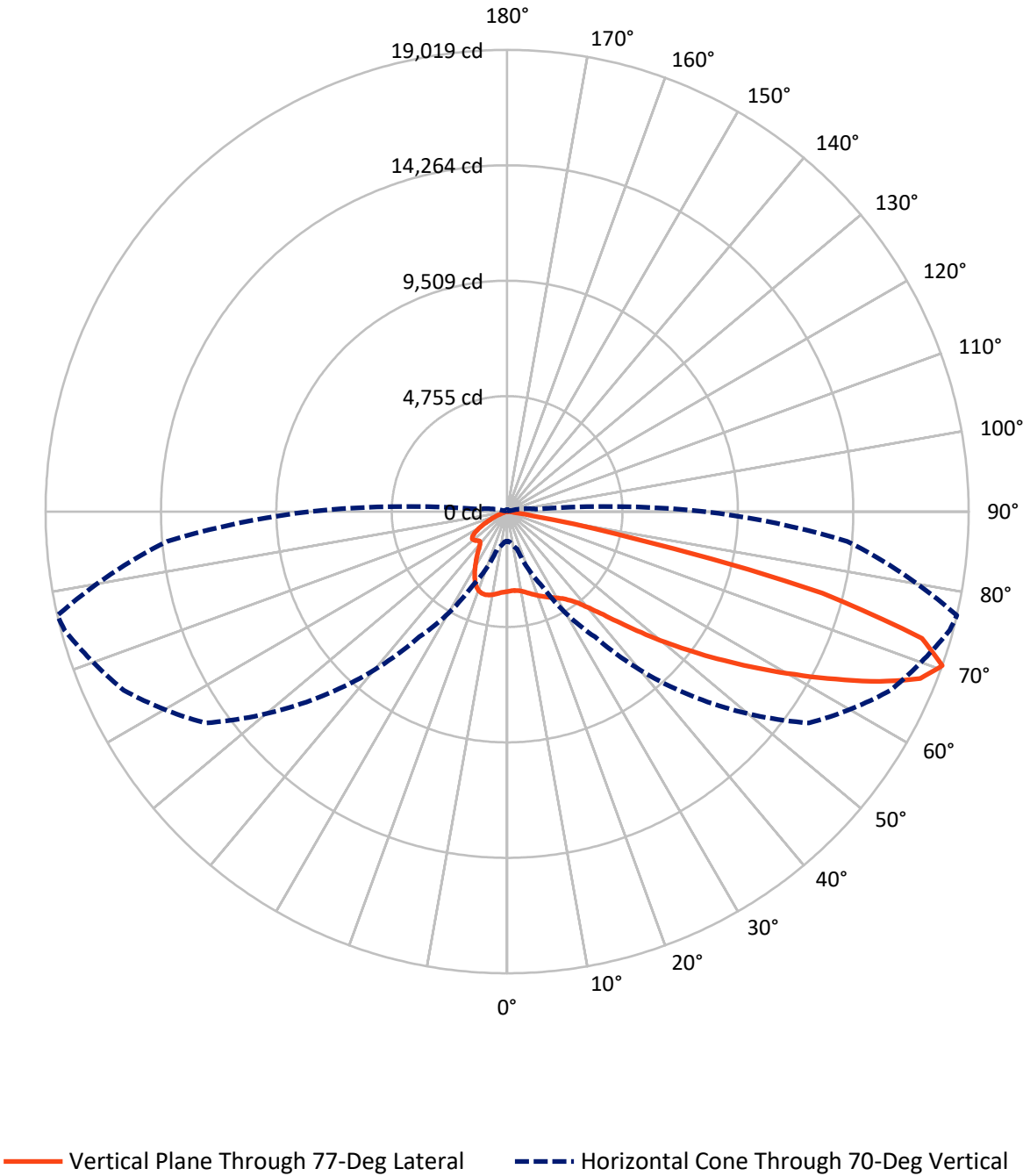
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2225.1	0.0	2225.1
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	18882.7	0.0	18882.7
	% Fixture	89.5	0.0	89.5
Total	Lumens	21107.8	0.0	21107.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.8	1.3
10°-20°	673.6	3.2
20°-30°	1041.9	4.9
30°-40°	1890.5	9.0
40°-50°	3568.6	16.9
50°-60°	5156.4	24.4
60°-70°	5488.8	26.0
70°-80°	2908.7	13.8
80°-90°	95.5	0.5
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°	21107.8	100.0
0°-180°	21107.8	100.0

Coefficient of Utilization



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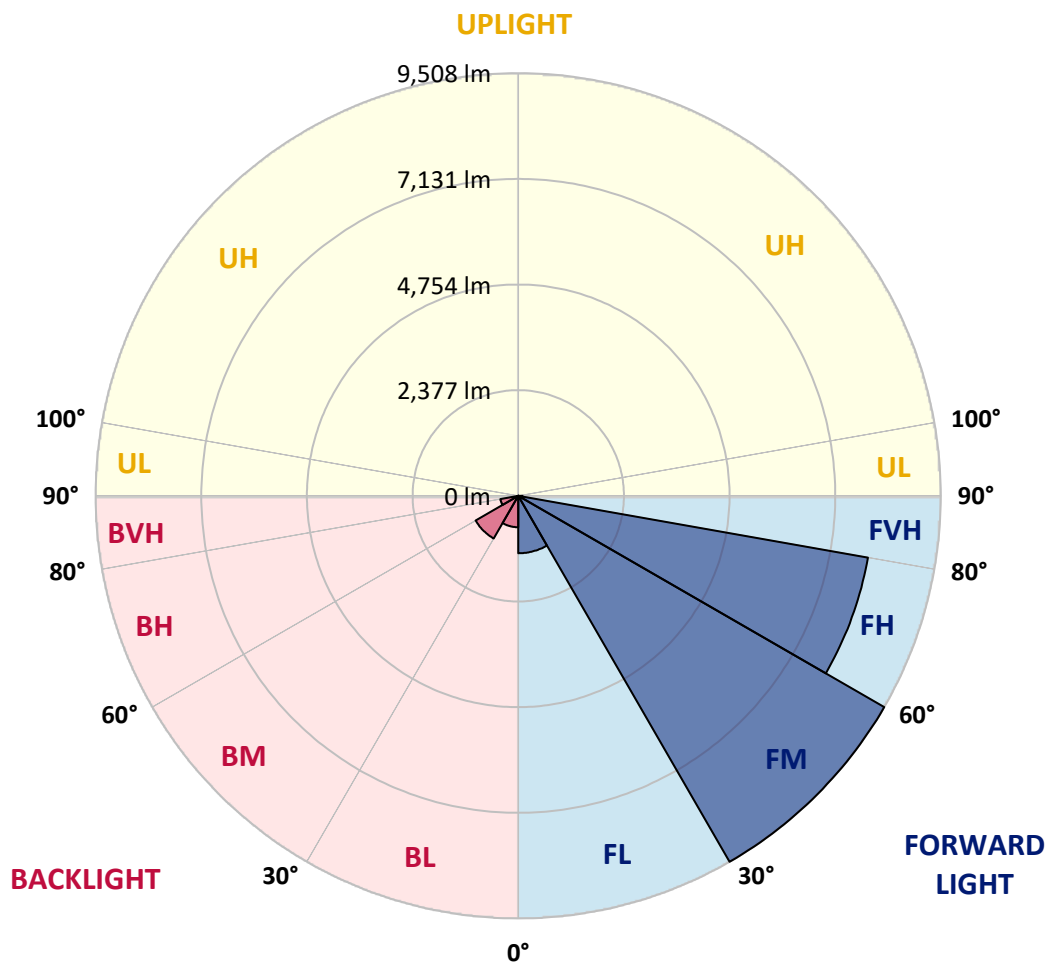
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1292.3	6.1			
FM	(30°-60°)	9507.9	45.0			
FH	(60°-80°)	7989.6	37.9			G4/12000
FVH	(80°-90°)	92.9	0.4			G1/100
BL	(0°-30°)	706.9	3.3	B2/1000		
BM	(30°-60°)	1107.7	5.2	B2/2500		
BH	(60°-80°)	407.9	1.9	B1/500		G1/500
BVH	(80°-90°)	2.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4
2.5°	3091.2	3119.2	3115.2	3133.8	3140.5	3167.1	3193.8	3229.8	3269.7	3268.4	3295.1
5°	2916.5	2944.5	2951.2	2976.5	3008.5	3049.9	3104.5	3176.5	3251.1	3263.1	3316.4
7.5°	2709.9	2739.2	2756.6	2807.3	2865.9	2951.2	3040.5	3145.8	3269.7	3287.1	3389.8
10°	2503.4	2530.0	2552.7	2624.6	2717.9	2844.6	2989.8	3141.8	3308.4	3333.8	3479.1
12.5°	2375.3	2400.7	2426.0	2488.7	2604.6	2759.3	2956.5	3160.5	3372.5	3408.4	3600.3
15°	2330.0	2352.7	2372.7	2428.6	2536.7	2712.6	2949.8	3199.1	3453.7	3501.7	3747.0
17.5°	2336.7	2348.7	2362.0	2404.6	2510.0	2691.2	2961.8	3265.8	3549.7	3592.3	3893.6
20°	2375.3	2382.0	2383.3	2412.6	2506.0	2688.6	2985.8	3329.7	3640.4	3697.7	4038.9
22.5°	2424.6	2427.3	2424.6	2444.6	2531.3	2708.6	3017.8	3407.1	3741.7	3795.0	4185.5
25°	2655.3	2604.6	2540.7	2502.0	2574.0	2747.2	3065.9	3511.0	3852.3	3904.2	4328.2
27.5°	3371.1	3225.8	2996.5	2739.2	2661.9	2803.3	3132.5	3616.3	3964.3	4010.9	4481.4
30°	4533.5	4342.8	3953.6	3373.8	2944.5	2920.5	3219.1	3721.7	4082.9	4133.5	4645.4
32.5°	5698.5	5651.8	5202.6	4400.1	3580.3	3181.8	3363.1	3864.2	4240.2	4280.2	4866.7
35°	6876.8	6782.1	6414.2	5621.1	4560.1	3713.7	3603.0	4050.9	4446.8	4492.2	5189.3
37.5°	7779.2	7721.9	7494.0	6840.8	5722.5	4534.8	4013.6	4340.2	4746.7	4797.4	5602.4
40°	8576.4	8549.7	8472.3	8041.8	7022.1	5609.1	4652.1	4788.1	5162.6	5222.6	6109.0
42.5°	9202.9	9265.5	9309.5	9189.5	8361.7	6835.5	5510.5	5417.2	5742.5	5803.8	6754.1
45°	9844.0	9865.3	10042.6	10215.9	9692.0	8117.8	6478.2	6154.3	6463.5	6539.6	7527.3
47.5°	10255.8	10341.2	10653.1	10958.4	10810.4	9389.4	7518.0	7024.7	7299.3	7442.0	8393.7
50°	10286.5	10447.8	10877.1	11408.9	11624.8	10599.8	8648.3	8016.5	8308.4	8465.7	9318.8
52.5°	9776.0	10026.7	10691.8	11470.3	12064.8	11624.8	9817.3	9008.2	9382.7	9588.1	10278.5
55°	7495.3	7823.2	9994.6	11136.9	12082.1	12402.0	10955.7	10041.3	10579.8	10811.7	11315.6
57.5°	6530.3	6695.5	7857.9	10558.4	11760.8	12715.2	11984.7	11025.0	11882.1	12170.0	12295.3
60°	5433.2	5650.4	6590.2	9612.0	11324.9	12745.9	12893.8	12294.0	13293.7	13617.6	13193.8
62.5°	3692.4	3928.3	4862.7	7985.9	10729.1	12731.2	13639.0	13600.3	14862.6	15210.5	13954.9
65°	2287.4	2435.3	3051.2	6520.9	9896.0	12747.2	14418.8	15186.5	16518.2	16871.4	14544.0
67.5°	1807.5	1875.4	2196.8	5006.6	8460.3	12387.3	15197.2	16678.2	18076.4	18356.3	14724.0
70°	1214.3	1255.6	1598.3	3356.5	6294.3	10726.4	15182.5	17427.3	18878.9	19018.9	14068.2
72.5°	639.8	671.8	934.4	1554.2	3801.6	7624.6	12797.8	16531.5	18080.4	17869.8	12024.7
75°	319.9	373.2	629.1	789.1	1623.6	4252.2	7947.1	13033.8	14230.8	13415.0	7715.3
77.5°	242.6	293.3	519.9	519.9	565.2	1431.6	3365.8	7108.8	6556.9	5459.9	2264.7
80°	154.7	200.0	454.6	393.2	236.0	363.9	877.1	1991.5	1393.0	1059.7	411.8
82.5°	90.6	130.6	378.5	259.9	131.9	134.6	247.9	423.8	361.2	281.3	126.6
85°	36.0	85.3	259.9	102.6	52.0	33.3	74.6	90.6	74.6	56.0	32.0
87.5°	0.0	20.0	45.3	0.0	4.0	2.7	5.3	6.7	6.7	5.3	10.7
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°	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4	3292.4
2.5°	3307.1	3309.7	3317.7	3319.1	3300.4	3276.4	3267.1	3263.1	3247.1	3245.8	3248.4
5°	3347.1	3359.1	3347.1	3312.4	3229.8	3113.8	3025.8	2953.8	2888.6	2868.6	2856.6
7.5°	3427.1	3439.1	3403.1	3267.1	3059.2	2828.6	2620.6	2474.0	2342.0	2292.7	2272.7
10°	3541.7	3557.7	3444.4	3169.8	2801.9	2431.3	2079.4	1831.5	1638.3	1559.5	1526.2
12.5°	3685.7	3692.4	3467.1	3021.8	2467.4	1938.2	1439.6	1174.3	1002.3	938.4	918.4
15°	3844.3	3834.9	3469.7	2820.6	2011.5	1370.3	939.7	771.8	702.4	681.1	681.1
17.5°	4010.9	3972.3	3416.4	2530.0	1511.6	937.1	697.1	657.1	645.1	639.8	638.5
20°	4174.8	4088.2	3319.1	2150.0	1085.1	699.8	633.1	621.2	614.5	611.8	609.2
22.5°	4324.2	4176.2	3152.5	1708.9	787.8	618.5	598.5	587.8	575.8	570.5	569.2
25°	4469.4	4226.9	2917.9	1296.9	630.5	578.5	562.5	542.5	526.5	519.9	517.2
27.5°	4610.8	4258.9	2624.6	959.7	562.5	541.2	511.9	483.9	471.9	469.2	466.6
30°	4761.3	4269.5	2291.4	715.8	521.2	494.6	451.9	419.8	413.2	414.5	414.5
32.5°	4945.3	4285.5	1955.5	586.5	486.6	438.6	387.9	354.5	349.2	354.5	353.2
35°	5165.3	4317.5	1631.6	539.9	455.9	381.2	326.6	298.6	293.3	297.2	295.9
37.5°	5463.9	4369.5	1329.0	530.5	430.5	333.2	274.6	251.9	251.9	253.3	251.9
40°	5861.1	4508.2	1058.4	523.9	417.2	297.2	232.0	222.6	226.6	229.3	229.3
42.5°	6345.0	4802.7	875.8	515.9	402.5	281.3	210.6	206.6	213.3	216.0	216.0
45°	6887.5	5175.9	811.8	502.6	389.2	291.9	201.3	196.0	204.0	205.3	206.6
47.5°	7448.7	5541.2	803.8	487.9	375.9	307.9	198.6	186.7	196.0	197.3	198.6
50°	8016.5	5779.8	811.8	465.2	354.5	307.9	200.0	177.3	185.3	189.3	190.6
52.5°	8588.4	5889.0	806.5	415.8	317.2	289.3	200.0	169.3	177.3	180.0	180.0
55°	9142.9	5867.7	725.2	342.6	269.3	255.9	194.6	162.7	168.0	169.3	169.3
57.5°	9581.4	5570.5	574.5	266.6	218.6	213.3	177.3	154.7	158.7	157.3	157.3
60°	9810.7	4917.3	410.5	205.3	172.0	168.0	156.0	143.9	146.7	139.9	138.6
62.5°	9813.3	4053.6	274.6	162.7	137.2	133.2	133.2	129.3	126.6	113.3	109.3
65°	9604.0	3095.2	182.7	129.3	110.6	103.9	111.9	110.6	101.3	82.6	79.9
67.5°	9129.6	2028.8	138.6	101.3	85.3	81.3	89.3	93.3	86.6	69.3	68.0
70°	8153.8	1181.0	114.6	78.6	64.0	60.0	72.0	79.9	72.0	56.0	53.3
72.5°	6772.8	637.1	93.3	58.6	44.0	40.0	57.3	65.3	57.3	41.3	40.0
75°	4394.8	341.2	72.0	38.6	22.7	25.3	42.6	48.0	40.0	26.6	24.0
77.5°	1475.6	150.7	45.3	18.7	10.7	10.7	25.3	29.3	18.7	9.3	8.0
80°	329.2	62.6	18.7	8.0	4.0	4.0	5.3	5.3	2.7	0.0	0.0
82.5°	107.9	25.3	8.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	41.3	9.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.0	1.3	0.0	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)