

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: P966614

Luminaire Tested: **NAV-SB4C-727-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966614
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-727-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24160.3 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

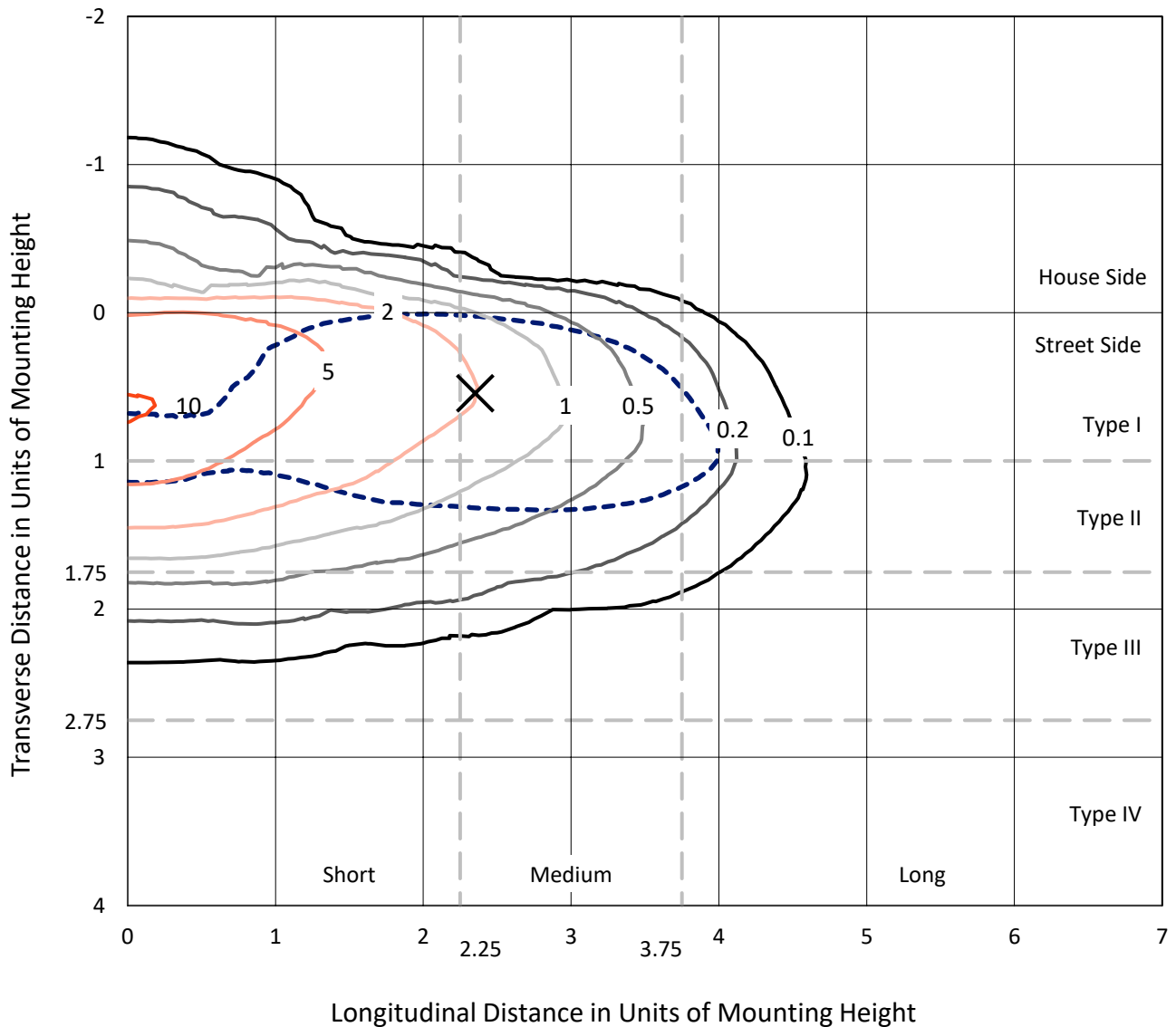
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

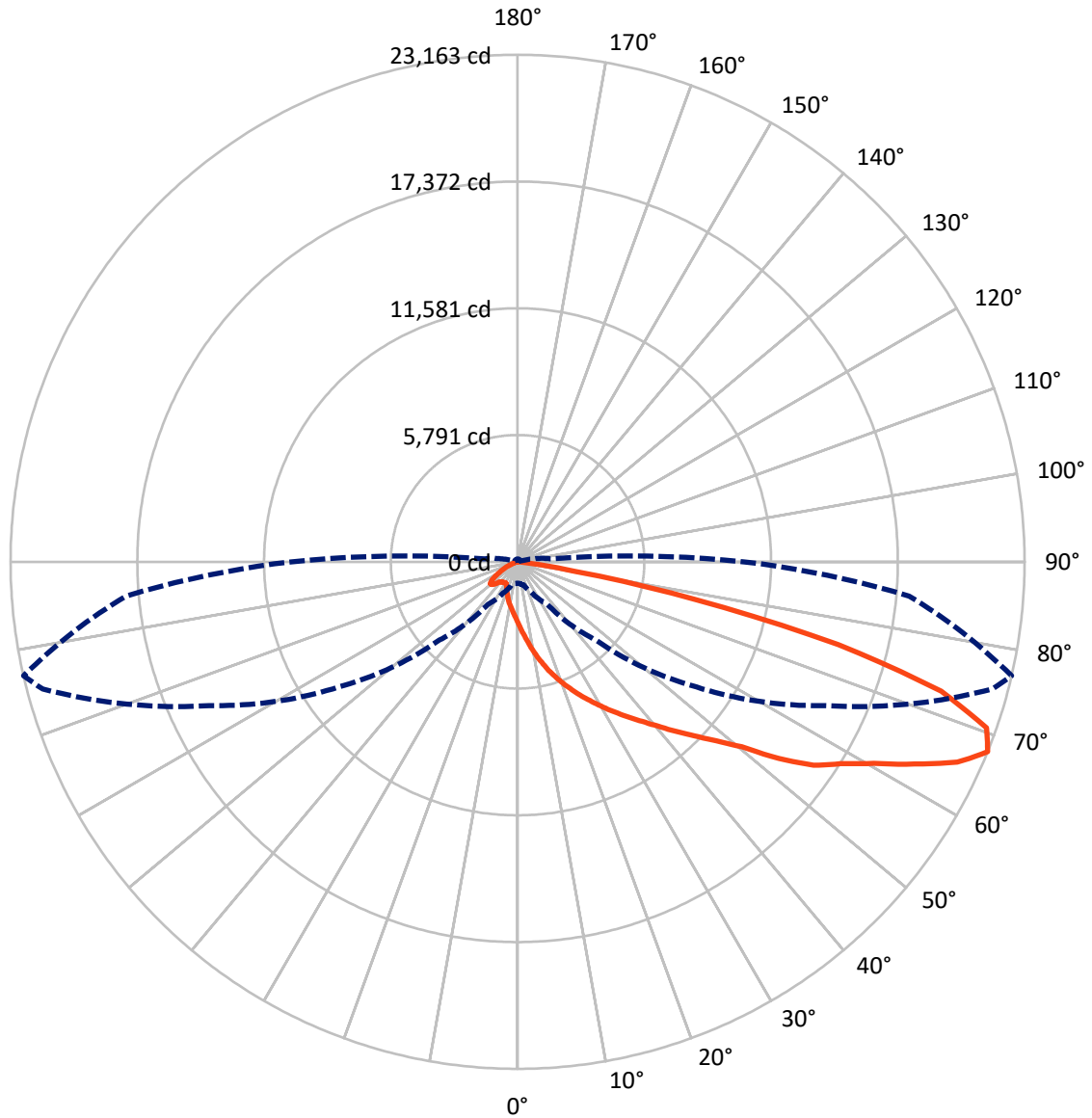
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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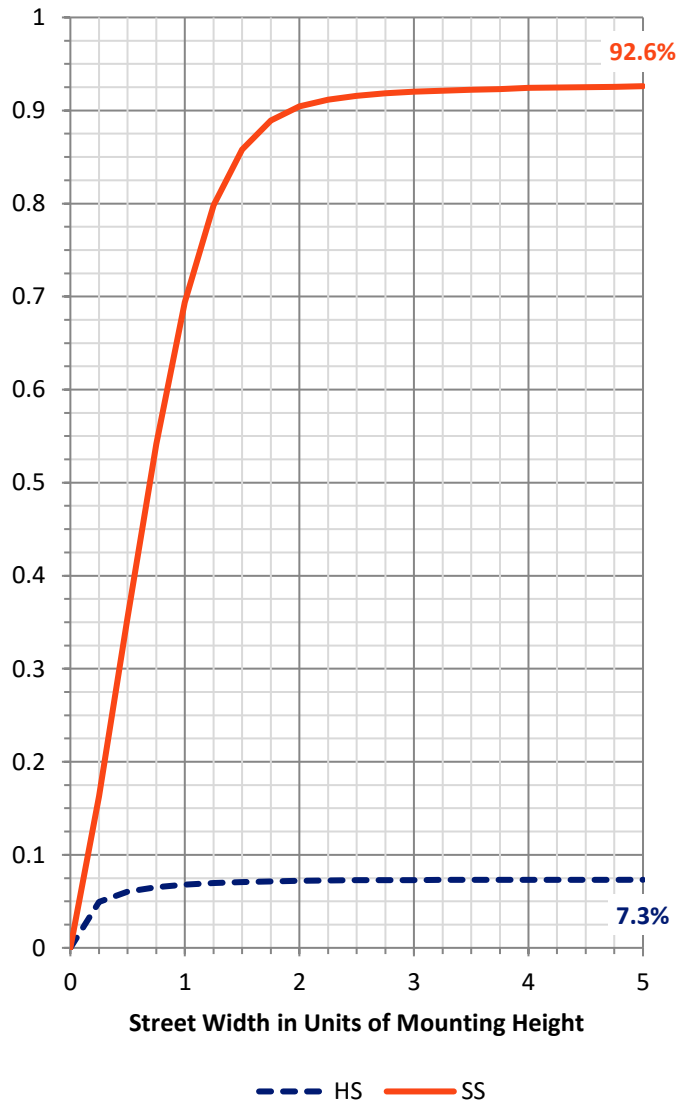
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1777.5	0.0	1777.5
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	22382.8	0.0	22382.8
	% Fixture	92.6	0.0	92.6
Total	Lumens	24160.3	0.0	24160.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.4	1.2
10°-20°	995.8	4.1
20°-30°	1921.6	8.0
30°-40°	3336.0	13.8
40°-50°	4843.7	20.0
50°-60°	5562.4	23.0
60°-70°	4829.2	20.0
70°-80°	2274.6	9.4
80°-90°	112.5	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°	24160.3	100.0
0°-180°	24160.3	100.0

Coefficient of Utilization

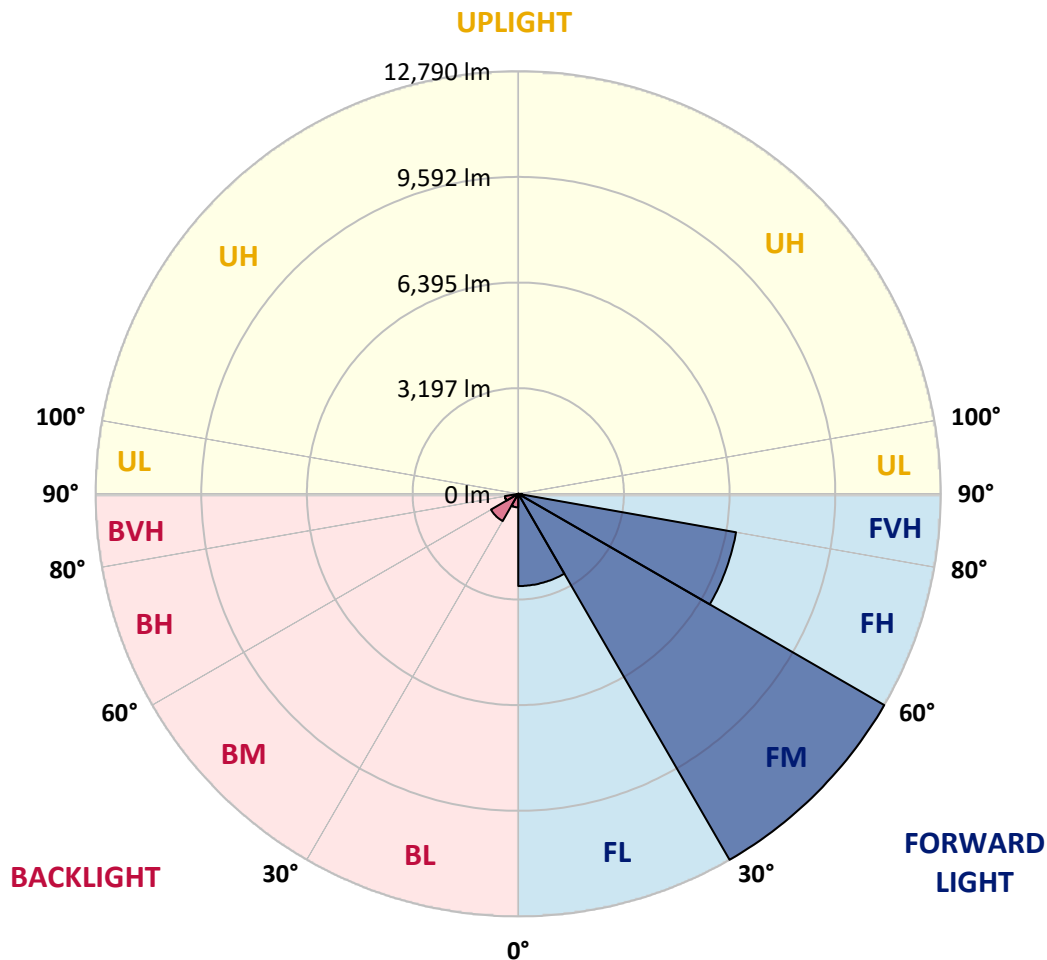


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2790.3	11.5			
FM (30°-60°)	12789.8	52.9			
FH (60°-80°)	6692.3	27.7			G3/7500
FVH (80°-90°)	110.4	0.5			G2/225
BL (0°-30°)	411.5	1.7	B1/500		
BM (30°-60°)	952.4	3.9	B1/1000		
BH (60°-80°)	411.5	1.7	B1/500		G1/500
BVH (80°-90°)	2.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1
2.5°	3857.3	3881.3	3846.7	3780.7	3681.7	3617.2	3459.7	3311.2	3146.1	3093.6	2928.5
5°	4701.9	4722.9	4683.9	4611.9	4479.9	4353.8	4146.8	3836.3	3513.7	3410.2	3117.6
7.5°	5327.5	5339.5	5324.6	5258.6	5132.5	4990.0	4758.9	4391.3	3912.7	3798.8	3350.1
10°	5777.6	5816.6	5812.2	5786.6	5702.6	5587.1	5341.1	4922.5	4359.8	4212.9	3612.7
12.5°	6076.2	6119.7	6145.2	6202.2	6197.7	6124.2	5908.1	5465.5	4805.4	4632.9	3908.2
15°	6163.2	6209.7	6307.2	6439.3	6556.2	6593.7	6442.2	5998.2	5296.0	5075.5	4211.3
17.5°	6113.7	6185.7	6302.7	6511.2	6767.8	6937.3	6920.8	6512.7	5741.6	5489.6	4508.4
20°	6223.2	6292.2	6383.7	6559.3	6857.9	7165.4	7288.4	7004.8	6184.2	5920.1	4820.5
22.5°	6829.3	6817.3	6826.3	6854.8	7033.3	7337.9	7591.5	7452.0	6622.3	6352.2	5150.5
25°	7789.5	7735.5	7643.9	7489.5	7444.5	7591.5	7855.5	7848.0	7084.4	6794.8	5488.1
27.5°	8890.7	8881.7	8667.2	8295.1	8085.1	8028.0	8154.1	8233.6	7541.9	7232.9	5827.1
30°	9945.4	9969.5	9679.9	9265.8	8880.2	8656.6	8542.7	8599.6	8007.0	7705.4	6176.6
32.5°	10863.6	10889.1	10574.0	10089.5	9612.3	9342.3	9102.2	8961.3	8514.2	8185.5	6560.7
35°	11639.3	11664.7	11303.2	10767.5	10259.0	10014.5	9742.8	9357.3	9024.2	8718.1	6988.3
37.5°	12332.4	12324.9	11840.3	11300.2	10800.5	10607.0	10464.5	9844.9	9549.3	9253.8	7462.4
40°	12742.0	12773.4	12359.3	11763.7	11279.2	11138.2	11129.1	10449.5	10155.5	9868.9	7981.6
42.5°	12862.0	12917.5	12617.4	12128.3	11688.8	11535.8	11771.3	11103.6	10860.6	10581.5	8568.2
45°	12645.9	12700.0	12563.4	12224.4	11967.8	11868.8	12323.4	11781.8	11613.8	11337.6	9229.8
47.5°	12015.8	12083.3	12116.3	12044.3	12041.3	12141.8	12818.4	12495.9	12507.9	12225.9	9996.4
50°	10796.1	10910.1	11213.2	11468.2	11862.7	12357.9	13300.1	13270.1	13516.1	13273.0	10995.6
52.5°	8578.6	8740.7	9784.9	10482.5	11369.2	12317.3	13829.6	14512.3	15284.9	14929.3	12404.3
55°	6893.8	6893.8	7743.0	9048.2	10406.0	12050.3	14060.7	15319.4	16489.7	16405.6	13396.0
57.5°	5620.1	5687.6	6229.2	7382.9	9012.2	11414.2	14203.2	15826.5	17460.4	17398.9	14365.3
60°	3468.7	3614.2	4637.4	5776.1	7426.4	10281.5	14113.2	16339.6	18638.1	18687.6	15532.4
62.5°	1953.3	2007.4	2463.5	4155.8	5774.6	8758.7	13424.5	16626.2	20144.3	20354.4	16735.7
65°	1348.8	1375.8	1551.3	2586.5	4002.7	6973.4	12078.8	16447.7	21653.6	22078.2	17755.9
67.5°	979.7	993.2	1102.7	1579.8	2374.9	5056.0	9969.5	15547.5	22453.3	23162.9	17950.9
70°	753.2	762.2	841.6	1038.2	1402.8	3120.6	7240.4	13757.7	21874.2	22721.9	16951.8
72.5°	612.1	621.2	682.6	768.1	930.2	1845.3	4388.3	11172.6	19317.7	20232.9	14431.3
75°	516.1	528.1	583.6	639.1	729.2	1185.2	2058.4	7780.5	14527.3	15127.4	10035.5
77.5°	286.6	264.0	474.1	529.6	615.1	750.1	963.2	4578.9	8136.0	8302.6	4452.8
80°	178.6	184.5	376.6	426.1	472.6	378.1	441.1	1762.8	2820.5	2679.6	862.6
82.5°	10.5	24.0	289.6	307.6	324.1	162.1	166.6	598.6	679.7	624.1	153.0
85°	0.0	0.0	132.0	106.5	112.5	46.5	48.0	139.5	91.5	99.0	30.0
87.5°	0.0	0.0	0.0	3.0	0.0	4.5	9.0	12.0	4.5	6.0	10.5
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°	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1	2786.1
2.5°	2823.6	2718.5	2505.5	2296.9	2127.4	1969.8	1857.4	1750.8	1696.8	1693.8	1690.8
5°	2909.1	2688.5	2262.5	1885.9	1582.8	1339.8	1182.2	1069.7	1012.7	993.2	990.1
7.5°	3029.1	2697.5	2049.4	1525.8	1168.7	960.2	870.1	834.1	822.2	808.6	805.6
10°	3180.6	2718.5	1858.8	1228.8	921.2	816.2	780.1	765.2	756.1	747.1	744.2
12.5°	3350.1	2738.0	1669.8	1020.2	810.2	756.1	730.6	712.7	700.6	690.1	687.2
15°	3515.1	2750.1	1473.2	874.6	753.2	709.6	682.6	663.2	646.7	634.6	633.1
17.5°	3678.7	2766.6	1288.7	787.6	706.6	663.2	636.1	612.1	598.6	585.1	583.6
20°	3860.3	2763.5	1114.7	726.1	660.1	616.6	588.1	565.6	552.1	537.1	535.6
22.5°	4028.2	2748.5	961.7	673.6	612.1	570.1	538.6	516.1	502.6	490.6	489.1
25°	4221.8	2736.5	834.1	625.7	567.1	525.1	490.6	469.6	454.6	444.1	442.6
27.5°	4407.8	2718.5	741.2	582.1	523.6	483.1	450.1	426.1	412.6	405.1	405.1
30°	4590.9	2714.0	706.6	540.1	484.6	444.1	411.1	388.6	378.1	375.0	373.6
32.5°	4811.5	2726.0	721.6	525.1	448.5	408.1	376.6	360.1	349.5	349.5	349.5
35°	5047.0	2723.0	744.2	538.6	424.6	372.1	348.1	337.5	327.1	327.1	327.1
37.5°	5342.5	2727.5	762.2	561.1	415.5	342.0	328.5	315.1	309.0	309.0	309.0
40°	5783.6	2876.0	753.2	580.7	412.6	321.0	294.1	289.6	285.1	285.1	285.1
42.5°	6323.7	3198.6	765.2	582.1	411.1	306.1	270.1	279.0	268.5	267.0	265.6
45°	6914.9	3551.2	841.6	550.6	409.6	298.6	258.1	268.5	252.0	252.0	252.0
47.5°	7501.5	3900.7	919.6	505.6	405.1	297.0	247.5	241.6	237.1	238.5	238.5
50°	8310.1	4185.8	949.7	444.1	394.6	294.1	228.1	229.5	226.5	229.5	229.5
52.5°	9190.8	4245.9	913.7	375.0	364.6	285.1	214.5	220.6	219.0	222.0	222.0
55°	9739.9	4181.3	754.6	312.0	318.1	249.1	201.0	213.0	213.0	213.0	213.0
57.5°	10307.0	3906.8	535.6	253.6	264.0	204.1	189.0	205.5	204.1	202.5	202.5
60°	10715.0	3462.7	352.6	208.6	210.0	168.0	175.6	193.5	192.1	184.5	184.5
62.5°	11019.6	2972.1	226.5	177.0	160.5	151.5	160.5	175.6	169.5	153.0	150.1
65°	10985.1	2292.4	174.0	151.5	132.0	132.0	139.5	153.0	135.0	108.0	105.1
67.5°	10344.5	1551.3	144.0	127.5	111.0	109.5	115.5	127.5	115.5	91.5	88.6
70°	9199.8	1014.2	115.5	99.0	88.6	81.0	93.0	109.5	97.5	73.5	70.5
72.5°	7466.9	618.1	87.0	72.1	64.5	52.5	73.5	90.0	78.0	54.0	51.0
75°	4830.9	315.1	60.0	46.5	34.5	31.5	54.0	67.5	54.0	33.0	28.5
77.5°	1848.4	132.0	33.0	21.0	18.0	15.0	30.0	40.5	22.5	7.5	6.0
80°	355.6	55.6	16.5	10.5	9.0	6.0	4.5	3.0	0.0	0.0	0.0
82.5°	61.5	18.0	6.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	21.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	0.0	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)