

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: P968728

Luminaire Tested: **NAV-SB5C-727-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968728  
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-SB5C-727-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

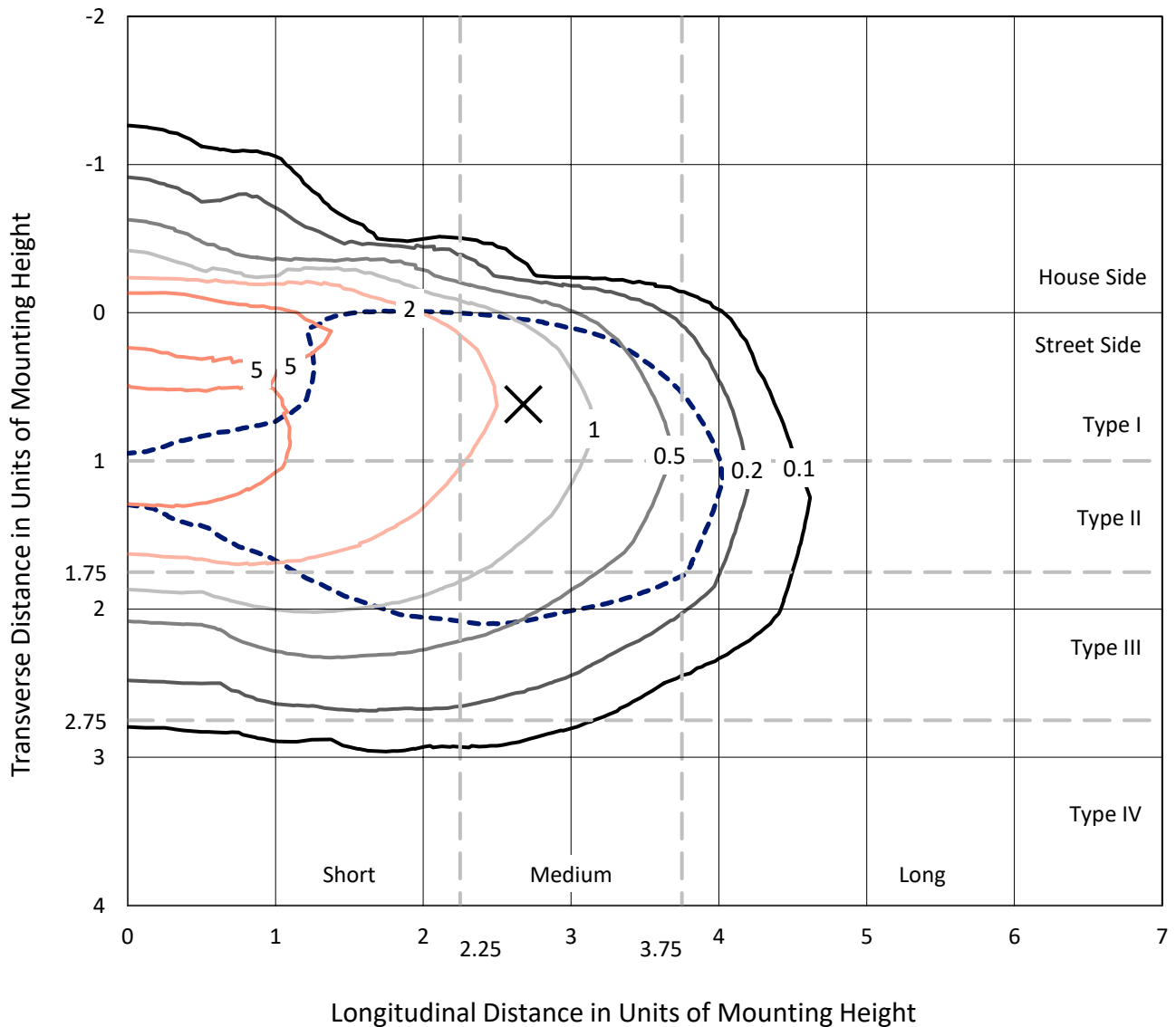
Lumens per Lamp: N/A  
Luminaire Lumens: 29943.3 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): NR  
Input Current (Ain): 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

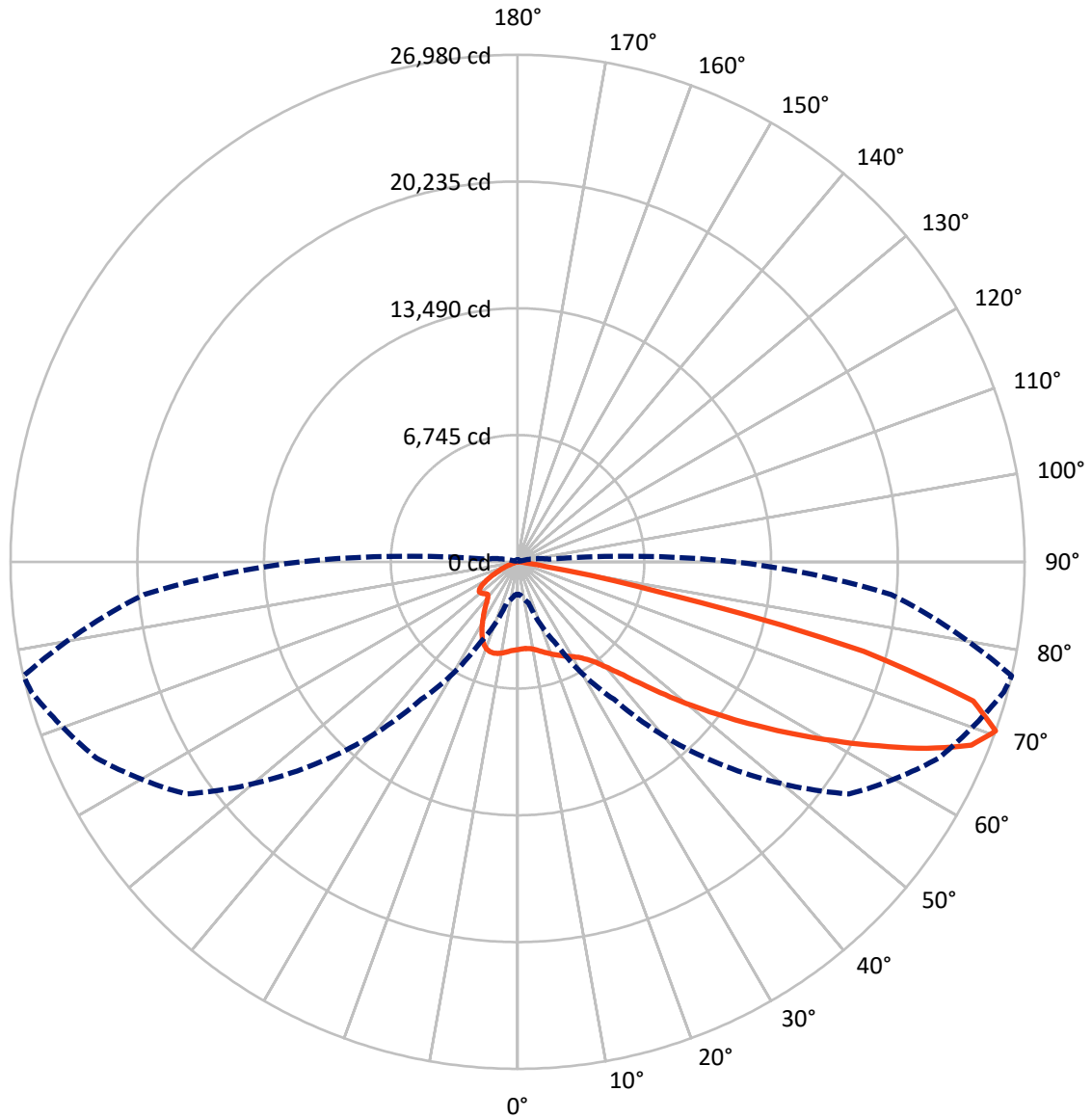
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3156.5	0.0	3156.5
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	26786.9	0.0	26786.9
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	29943.3	0.0	29943.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	402.5	1.3
10°-20°	955.6	3.2
20°-30°	1478.0	4.9
30°-40°	2681.9	9.0
40°-50°	5062.4	16.9
50°-60°	7314.8	24.4
60°-70°	7786.4	26.0
70°-80°	4126.2	13.8
80°-90°	135.5	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°	29943.3	100.0
0°-180°	29943.3	100.0

**Coefficient of Utilization**

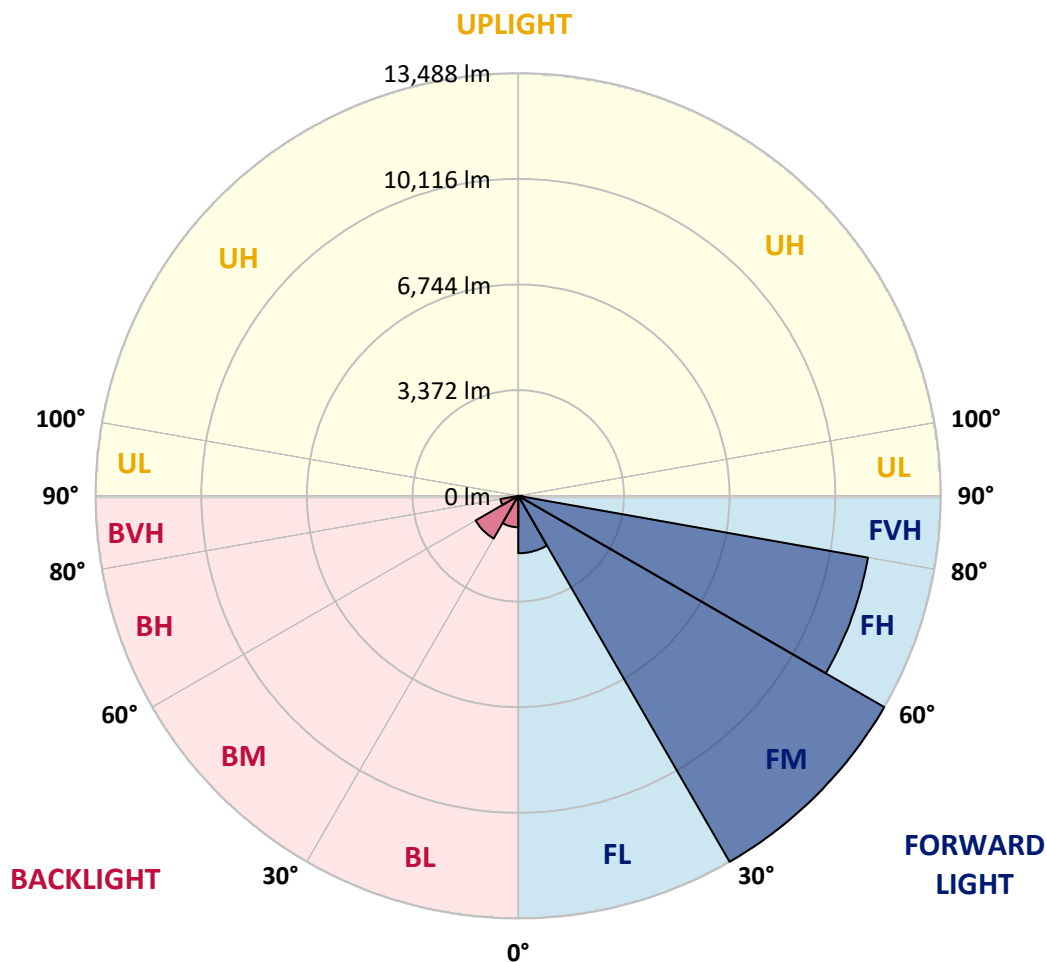


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1833.2	6.1			
FM (30°-60°)	13487.8	45.0			
FH (60°-80°)	11334.0	37.9			G4/12000
FVH (80°-90°)	131.8	0.4			G2/225
BL (0°-30°)	1002.9	3.3	B3/2500		
BM (30°-60°)	1571.3	5.2	B2/2500		
BH (60°-80°)	578.7	1.9	B2/1000		G2/1000
BVH (80°-90°)	3.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6
2.5°	4385.1	4424.8	4419.1	4445.6	4455.1	4492.9	4530.7	4581.8	4638.4	4636.6	4674.4
5°	4137.4	4177.1	4186.5	4222.5	4267.9	4326.4	4404.0	4506.1	4612.0	4629.0	4704.6
7.5°	3844.3	3885.9	3910.5	3982.3	4065.6	4186.5	4313.2	4462.6	4638.4	4663.0	4808.7
10°	3551.2	3589.0	3621.1	3723.2	3855.6	4035.2	4241.3	4456.9	4693.3	4729.2	4935.4
12.5°	3369.7	3405.6	3441.5	3530.4	3694.9	3914.3	4194.1	4483.5	4784.1	4835.1	5107.5
15°	3305.3	3337.5	3365.9	3445.3	3598.5	3848.1	4184.7	4538.3	4899.4	4967.5	5315.4
17.5°	3314.8	3331.9	3350.7	3411.3	3560.6	3817.8	4201.7	4632.8	5035.6	5096.1	5523.4
20°	3369.7	3379.1	3381.0	3422.6	3555.0	3814.0	4235.7	4723.6	5164.2	5245.4	5729.5
22.5°	3439.6	3443.4	3439.6	3468.0	3590.9	3842.4	4281.1	4833.3	5307.9	5383.5	5937.5
25°	3766.8	3694.9	3604.1	3549.3	3651.4	3897.3	4349.2	4980.8	5464.8	5538.6	6139.9
27.5°	4782.1	4576.1	4250.9	3885.9	3776.2	3976.7	4443.7	5130.1	5623.7	5689.9	6357.4
30°	6431.1	6160.7	5608.5	4785.9	4177.1	4143.0	4566.6	5279.5	5792.0	5863.8	6589.9
32.5°	8083.8	8017.6	7380.3	6241.9	5079.1	4513.7	4770.9	5481.8	6015.1	6071.8	6903.8
35°	9755.3	9621.1	9099.2	7974.1	6468.9	5268.2	5111.2	5746.6	6308.2	6372.4	7361.4
37.5°	11035.6	10954.2	10630.9	9704.3	8117.8	6433.0	5693.6	6156.9	6733.6	6805.5	7947.6
40°	12166.3	12128.5	12018.8	11408.0	9961.5	7957.1	6599.4	6792.3	7323.6	7408.7	8666.2
42.5°	13055.0	13143.9	13206.3	13036.2	11861.8	9696.7	7817.2	7684.7	8146.2	8233.1	9581.4
45°	13964.6	13994.8	14246.4	14492.2	13749.0	11515.8	9189.9	8730.4	9169.1	9277.0	10678.1
47.5°	14548.8	14669.9	15112.4	15545.4	15335.5	13319.8	10664.9	9965.3	10354.8	10557.1	11907.2
50°	14592.4	14821.2	15430.0	16184.5	16490.9	15036.7	12268.4	11372.1	11786.3	12009.3	13219.5
52.5°	13868.1	14223.6	15167.2	16271.6	17114.8	16490.9	13926.8	12779.0	13310.3	13601.5	14581.0
55°	10632.7	11097.9	14178.2	15798.8	17139.4	17593.3	15541.7	14244.4	15008.4	15337.4	16052.2
57.5°	9263.7	9498.2	11147.1	14978.1	16683.7	18037.6	17001.5	15640.0	16855.8	17264.3	17442.0
60°	7707.5	8015.7	9348.8	13635.6	16065.4	18081.1	18291.0	17440.2	18858.4	19317.9	18716.5
62.5°	5237.9	5572.6	6898.1	11328.6	15220.1	18060.4	19348.1	19293.3	21083.9	21577.5	19796.2
65°	3244.8	3454.8	4328.4	9250.4	14038.3	18083.0	20454.3	21543.4	23432.5	23933.6	20632.0
67.5°	2564.1	2660.6	3116.3	7102.3	12001.8	17572.5	21558.6	23659.5	25643.0	26040.1	20887.3
70°	1722.6	1781.2	2267.2	4761.4	8929.0	15216.4	21537.8	24722.2	26781.4	26979.9	19957.0
72.5°	907.6	953.0	1325.5	2204.9	5392.9	10816.2	18154.9	23451.4	25648.7	25349.9	17058.2
75°	453.9	529.4	892.6	1119.4	2303.2	6032.1	11273.8	18489.6	20187.7	19030.4	10944.7
77.5°	344.2	416.0	737.5	737.5	801.8	2030.8	4774.7	10084.4	9301.6	7745.3	3212.7
80°	219.4	283.6	644.8	557.8	334.7	516.2	1244.2	2825.1	1976.0	1503.3	584.2
82.5°	128.5	185.3	537.0	368.7	187.2	191.0	351.7	601.4	512.4	399.0	179.7
85°	51.0	121.1	368.7	145.7	73.7	47.3	105.9	128.5	105.9	79.4	45.4
87.5°	0.0	28.4	64.3	0.0	5.6	3.8	7.6	9.4	9.4	7.6	15.2
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°	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6	4670.6
2.5°	4691.4	4695.2	4706.6	4708.4	4682.0	4648.0	4634.6	4629.0	4606.3	4604.4	4608.2
5°	4748.1	4765.1	4748.1	4699.0	4581.8	4417.2	4292.4	4190.3	4097.6	4069.2	4052.2
7.5°	4861.6	4878.6	4827.5	4634.6	4339.7	4012.6	3717.6	3509.6	3322.3	3252.4	3224.0
10°	5024.2	5046.9	4886.2	4496.7	3974.7	3449.0	2949.8	2598.2	2324.0	2212.4	2165.1
12.5°	5228.4	5237.9	4918.4	4286.8	3500.2	2749.5	2042.2	1665.9	1422.0	1331.3	1302.9
15°	5453.5	5440.2	4922.2	4001.2	2853.4	1943.9	1333.1	1094.8	996.5	966.3	966.3
17.5°	5689.9	5635.0	4846.5	3589.0	2144.3	1329.3	988.9	932.2	915.2	907.6	905.8
20°	5922.4	5799.6	4708.4	3050.1	1539.2	992.7	898.2	881.2	871.8	868.0	864.2
22.5°	6134.2	5924.3	4472.1	2424.2	1117.6	877.4	849.0	833.9	816.9	809.3	807.4
25°	6340.3	5996.1	4139.3	1839.9	894.4	820.7	798.0	769.6	746.9	737.5	733.7
27.5°	6540.7	6041.6	3723.2	1361.5	798.0	767.7	726.1	686.4	669.4	665.6	661.8
30°	6754.4	6056.7	3250.5	1015.5	739.3	701.5	641.0	595.6	586.2	588.0	588.0
32.5°	7015.4	6079.4	2774.0	832.0	690.2	622.1	550.2	503.0	495.4	503.0	501.1
35°	7327.4	6124.8	2314.6	765.9	646.7	540.8	463.3	423.5	416.0	421.7	419.7
37.5°	7750.9	6198.5	1885.3	752.6	610.8	472.7	389.5	357.4	357.4	359.3	357.4
40°	8314.5	6395.2	1501.4	743.1	591.8	421.7	329.0	315.8	321.4	325.2	325.2
42.5°	9000.8	6813.1	1242.3	731.7	571.0	399.0	298.8	293.0	302.6	306.4	306.4
45°	9770.5	7342.5	1151.6	712.9	552.2	414.1	285.6	278.0	289.4	291.2	293.0
47.5°	10566.5	7860.6	1140.2	692.1	533.2	436.9	281.8	264.8	278.0	279.8	281.8
50°	11372.1	8199.1	1151.6	659.9	503.0	436.9	283.6	251.5	262.8	268.5	270.4
52.5°	12183.4	8354.2	1144.0	590.0	450.1	410.3	283.6	240.2	251.5	255.3	255.3
55°	12969.9	8323.9	1028.7	486.0	382.0	363.1	276.0	230.7	238.2	240.2	240.2
57.5°	13592.1	7902.2	815.0	378.2	310.2	302.6	251.5	219.4	225.0	223.1	223.1
60°	13917.3	6975.6	582.4	291.2	244.0	238.2	221.2	204.2	208.0	198.5	196.7
62.5°	13921.0	5750.4	389.5	230.7	194.7	189.1	189.1	183.4	179.7	160.7	155.1
65°	13624.2	4390.8	259.0	183.4	156.9	147.5	158.9	156.9	143.7	117.3	113.5
67.5°	12951.1	2878.0	196.7	143.7	121.1	115.3	126.7	132.3	122.9	98.3	96.5
70°	11566.9	1675.4	162.7	111.5	90.8	85.1	102.1	113.5	102.1	79.4	75.6
72.5°	9607.8	903.8	132.3	83.2	62.4	56.7	81.3	92.7	81.3	58.6	56.7
75°	6234.5	484.1	102.1	54.8	32.2	36.0	60.5	68.1	56.7	37.8	34.0
77.5°	2093.3	213.7	64.3	26.4	15.2	15.2	36.0	41.6	26.4	13.2	11.4
80°	467.1	88.9	26.4	11.4	5.6	5.6	7.6	7.6	3.8	0.0	0.0
82.5°	153.1	36.0	11.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	58.6	13.2	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	22.7	1.8	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)