

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: P195948

Luminaire Tested: **NAV-AF-06-D-UNV-5NQ-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P195948  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-06-D-UNV-5NQ-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30605.7 lumens  
Efficiency: N/A  
Efficacy: 122.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G2

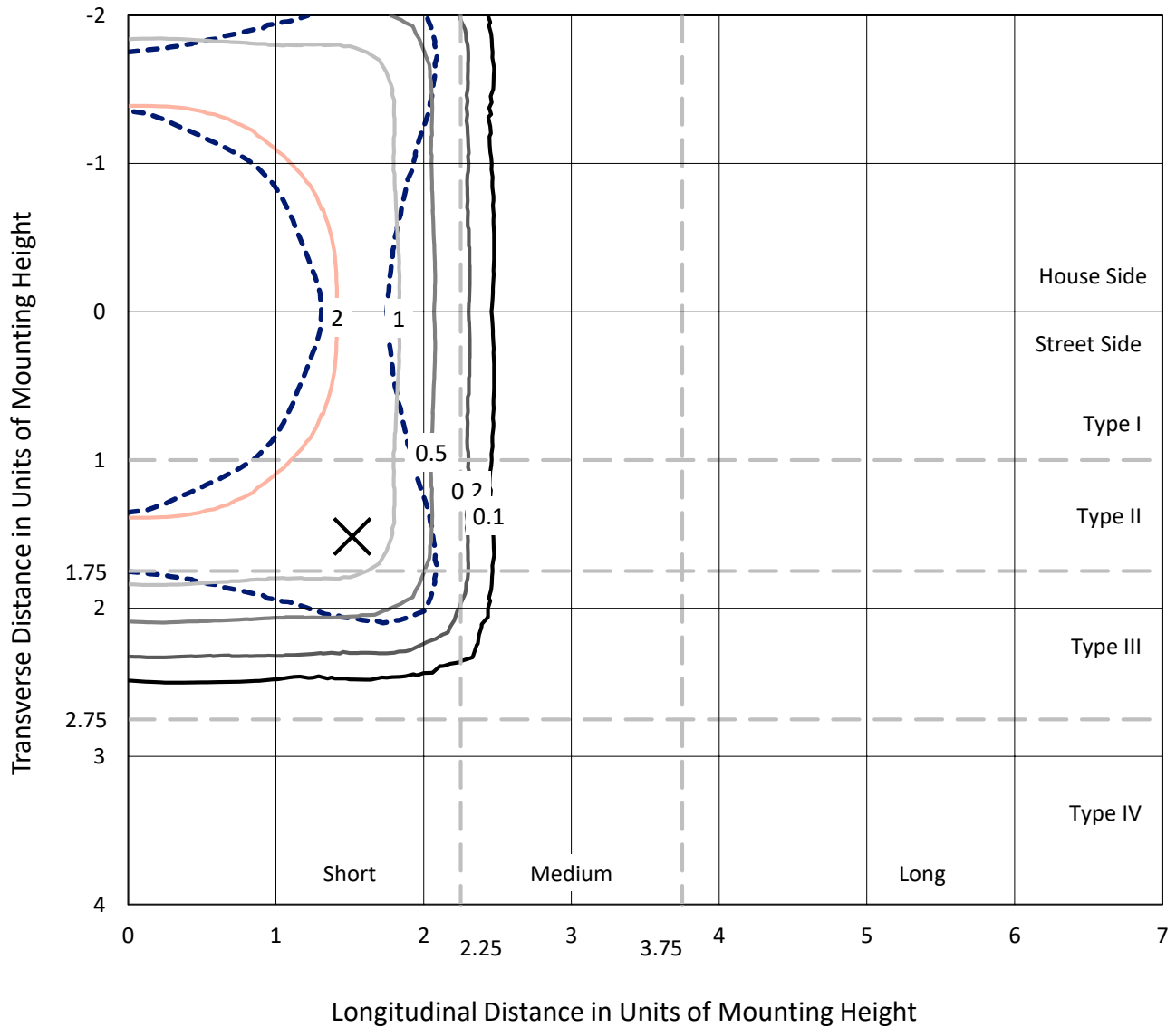
Input Watts (W): 249  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

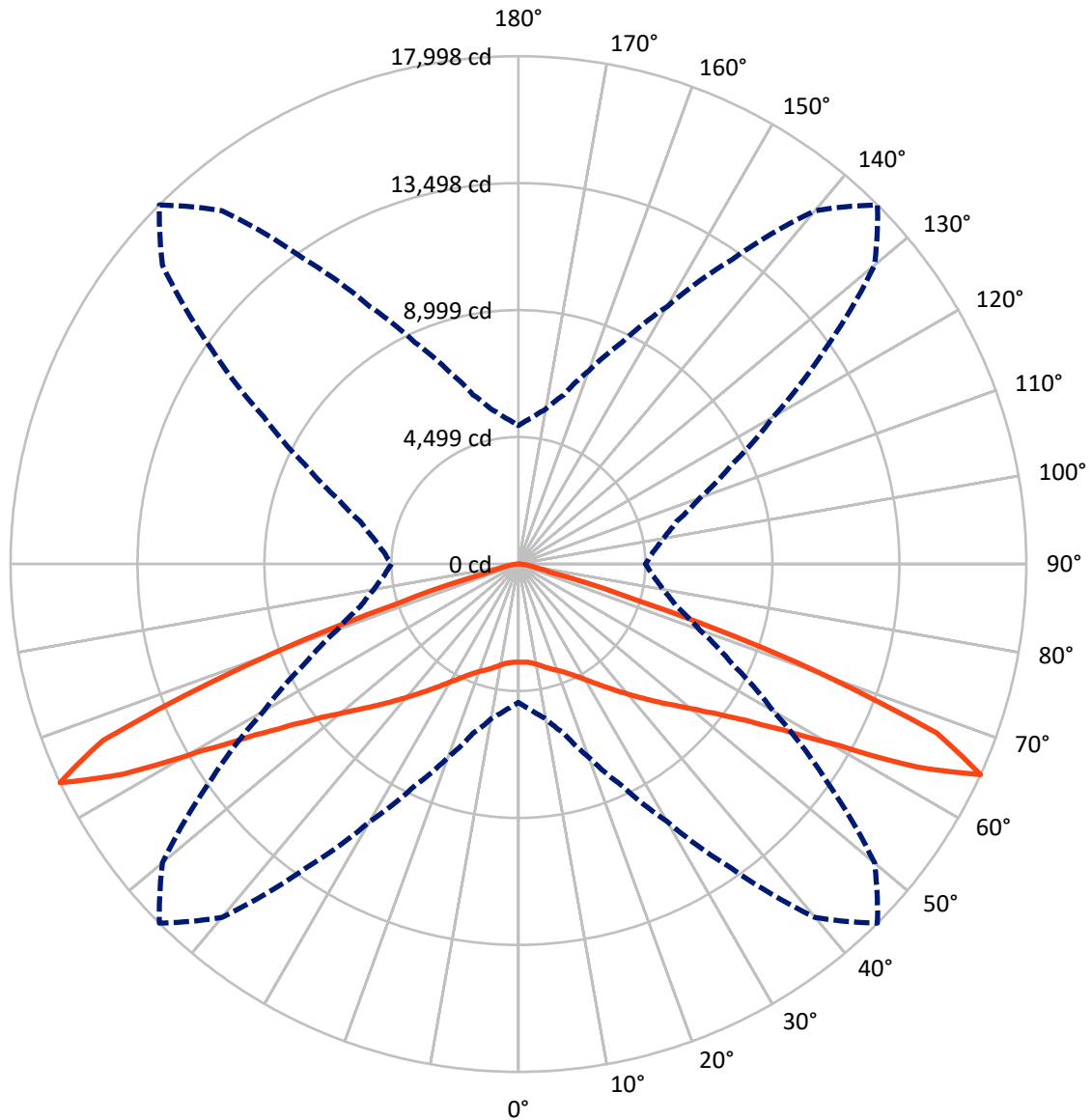
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.9 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15302.8	0.0	15302.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	15302.8	0.0	15302.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	30605.7	0.0	30605.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	339.0	1.1
10°-20°	1086.6	3.6
20°-30°	2027.0	6.6
30°-40°	3417.8	11.2
40°-50°	5551.5	18.1
50°-60°	8698.2	28.4
60°-70°	8210.7	26.8
70°-80°	1106.5	3.6
80°-90°	168.5	0.6
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°	30605.7	100.0
0°-180°	30605.7	100.0

**Coefficient of Utilization**



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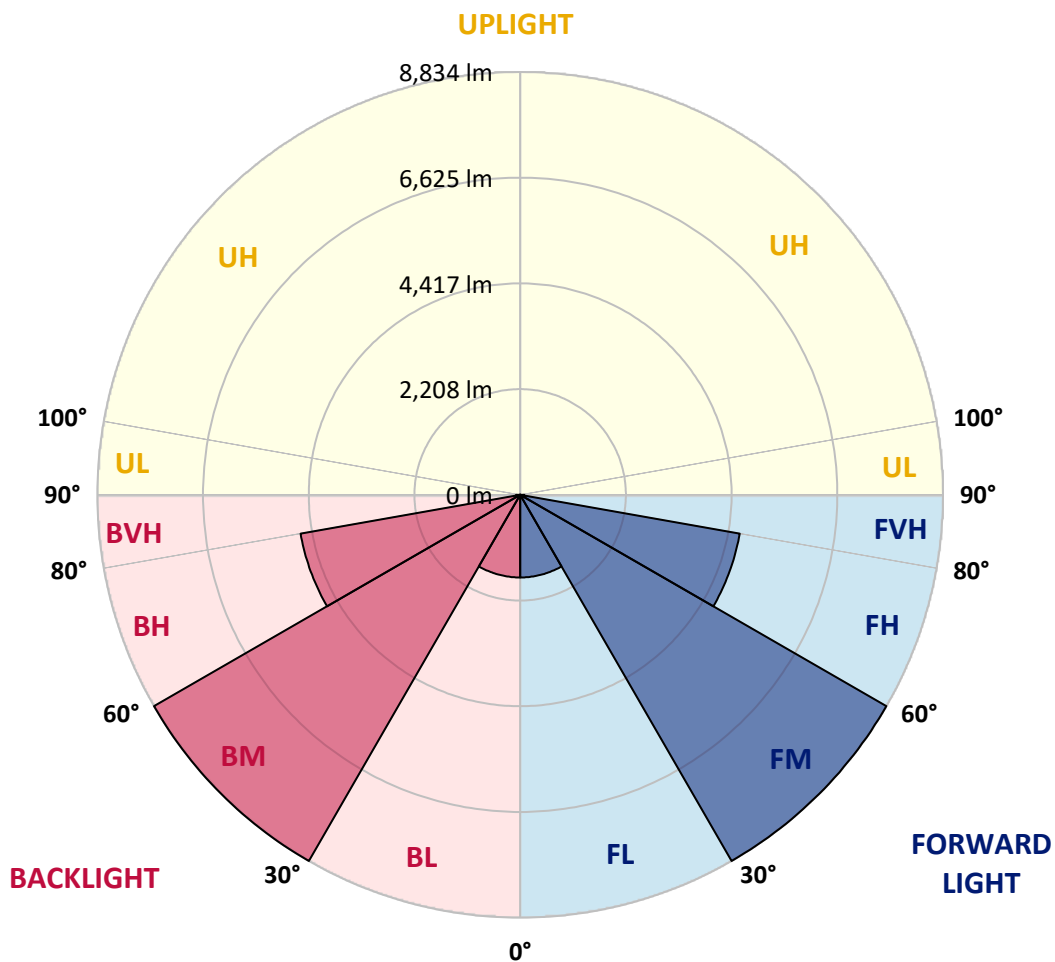
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1726.3	5.6			
FM	(30°-60°)	8833.7	28.9			
FH	(60°-80°)	4658.6	15.2			G2/5000
FVH	(80°-90°)	84.3	0.3			G1/100
BL	(0°-30°)	1726.3	5.6	B3/2500		
BM	(30°-60°)	8833.7	28.9	B5		
BH	(60°-80°)	4658.6	15.2	B4/5000		G2/5000
BVH	(80°-90°)	84.3	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4
2.5°	3509.9	3509.9	3515.7	3513.7	3506.2	3500.4	3494.7	3487.0	3483.2	3479.5	3477.5
5°	3529.0	3529.0	3534.7	3532.9	3527.1	3519.5	3515.7	3509.9	3504.2	3500.4	3502.4
7.5°	3576.6	3578.6	3580.5	3578.6	3572.9	3567.1	3559.6	3557.6	3549.9	3544.3	3548.1
10°	3649.2	3649.2	3651.0	3653.0	3649.2	3635.8	3635.8	3632.0	3624.3	3616.7	3618.6
12.5°	3729.2	3729.2	3731.1	3731.1	3731.1	3723.4	3725.4	3723.4	3713.9	3710.1	3713.9
15°	3807.4	3809.3	3809.3	3813.0	3813.0	3815.0	3822.7	3822.7	3818.8	3816.9	3816.9
17.5°	3898.9	3902.7	3904.6	3910.3	3912.3	3916.1	3923.6	3925.6	3927.5	3921.8	3923.6
20°	4020.9	4022.9	4028.6	4030.4	4038.1	4038.1	4041.9	4039.9	4036.2	4028.6	4028.6
22.5°	4158.2	4162.0	4173.4	4173.4	4182.9	4177.2	4179.2	4173.4	4163.9	4160.1	4156.2
25°	4337.4	4343.1	4352.7	4348.9	4352.7	4343.1	4343.1	4343.1	4337.4	4331.7	4329.7
27.5°	4564.3	4554.8	4564.3	4556.6	4554.8	4547.1	4549.1	4545.2	4539.4	4537.6	4529.9
30°	4800.7	4789.3	4795.0	4796.9	4793.0	4791.2	4783.5	4777.8	4768.3	4770.2	4764.5
32.5°	5071.4	5060.0	5065.7	5067.6	5063.8	5067.6	5065.7	5052.4	5040.9	5048.6	5048.6
35°	5393.6	5386.0	5401.3	5407.0	5395.6	5389.8	5382.2	5366.9	5349.7	5361.2	5363.1
37.5°	5780.7	5771.1	5782.5	5797.8	5776.8	5765.5	5734.9	5712.1	5700.6	5706.3	5713.9
40°	6182.9	6184.9	6217.3	6221.1	6198.2	6184.9	6154.4	6120.0	6087.6	6087.6	6097.1
42.5°	6606.2	6611.9	6650.0	6663.4	6655.7	6631.0	6589.0	6547.1	6505.1	6512.8	6524.2
45°	7084.8	7077.1	7117.2	7149.6	7143.9	7136.2	7096.2	7019.9	6981.7	6979.9	6998.9
47.5°	7588.0	7603.3	7645.2	7700.6	7698.6	7679.6	7628.1	7557.6	7487.0	7492.7	7515.6
50°	8175.3	8196.3	8266.8	8322.1	8329.7	8324.0	8263.0	8181.0	8081.8	8087.6	8118.0
52.5°	8701.5	8732.0	8813.9	8928.4	8998.9	9031.3	8991.3	8915.0	8813.9	8819.7	8852.1
55°	9178.1	9225.8	9347.8	9504.1	9645.2	9776.8	9835.9	9833.9	9759.7	9776.8	9818.7
57.5°	9477.4	9544.2	9729.1	9980.8	10261.0	10526.1	10754.8	10970.3	11017.9	11107.5	11107.5
60°	9075.2	9231.5	9477.4	9908.3	10459.4	11054.2	11698.6	12325.8	12730.0	13048.5	12876.8
62.5°	7578.5	7809.2	8154.4	8722.5	9580.4	10642.4	11936.9	13395.4	14916.9	15847.2	15164.7
65°	4903.6	5193.4	5569.0	6207.7	7288.7	8655.7	10541.3	13162.8	16346.8	17997.8	16472.6
67.5°	1942.8	2139.2	2367.9	2821.7	3759.8	5102.0	7218.1	10451.7	14434.4	15992.1	14281.9
70°	928.5	960.9	1004.7	1102.0	1336.5	1803.6	2899.9	5149.6	8852.1	10493.6	8640.5
72.5°	671.1	676.8	697.8	730.2	798.8	894.2	1086.8	1574.8	3052.4	4438.5	3056.2
75°	509.0	516.7	528.1	545.2	581.5	627.3	699.7	838.9	1044.7	1204.9	1042.9
77.5°	387.0	394.7	404.2	421.4	440.4	472.8	499.5	554.8	642.5	676.8	673.0
80°	282.1	295.5	310.8	326.0	339.4	354.7	356.5	383.2	432.8	465.2	455.6
82.5°	179.2	190.7	230.7	247.9	249.8	253.6	251.6	253.6	280.3	303.1	295.5
85°	114.4	122.0	143.0	162.0	158.3	165.8	165.8	162.0	150.6	129.6	154.5
87.5°	57.2	59.1	68.6	85.8	81.9	72.4	70.6	70.6	51.5	43.9	47.7
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4	3481.4
2.5°	3471.8	3475.7	3470.0	3470.0	3468.0	3471.8	3466.1	3466.1
5°	3498.5	3504.2	3502.4	3502.4	3506.2	3509.9	3508.0	3506.2
7.5°	3546.2	3549.9	3553.8	3555.7	3559.6	3557.6	3561.4	3559.6
10°	3618.6	3614.8	3620.5	3614.8	3616.7	3613.0	3614.8	3614.8
12.5°	3710.1	3704.4	3700.6	3696.8	3696.8	3689.2	3689.2	3691.1
15°	3815.0	3805.5	3797.8	3794.0	3790.2	3790.2	3784.5	3788.3
17.5°	3918.0	3908.4	3895.1	3895.1	3889.4	3885.6	3881.7	3891.3
20°	4026.6	4017.1	4009.5	4007.6	3996.2	3992.3	3994.2	4005.7
22.5°	4152.5	4146.7	4146.7	4143.0	4135.3	4129.6	4129.6	4143.0
25°	4322.2	4310.7	4312.7	4314.5	4310.7	4310.7	4306.9	4316.4
27.5°	4529.9	4520.4	4526.1	4529.9	4526.1	4531.9	4526.1	4533.8
30°	4774.0	4768.3	4774.0	4779.7	4770.2	4770.2	4766.3	4772.1
32.5°	5065.7	5058.1	5061.9	5061.9	5048.6	5037.1	5021.9	5033.3
35°	5386.0	5376.4	5384.1	5389.8	5374.6	5363.1	5340.2	5349.7
37.5°	5738.8	5742.5	5752.1	5776.8	5773.0	5754.0	5736.8	5744.4
40°	6133.4	6152.4	6194.4	6211.6	6207.7	6188.6	6165.7	6169.6
42.5°	6579.5	6604.3	6648.2	6676.7	6663.4	6636.7	6608.1	6619.5
45°	7065.6	7103.8	7161.0	7189.6	7172.4	7143.9	7103.8	7124.8
47.5°	7580.5	7656.7	7733.0	7771.1	7765.3	7725.3	7673.9	7679.6
50°	8196.3	8297.3	8394.5	8432.7	8404.1	8343.1	8270.6	8268.7
52.5°	8962.7	9071.3	9151.4	9141.9	9071.3	8976.0	8894.0	8890.3
55°	9919.8	9956.0	9944.5	9862.6	9738.7	9590.0	9485.1	9467.9
57.5°	11077.0	10955.0	10775.8	10528.0	10249.6	9967.4	9776.8	9706.3
60°	12491.7	11940.7	11300.1	10625.2	10009.4	9548.0	9256.3	9079.0
62.5°	13660.4	12064.7	10632.9	9460.2	8501.3	7931.2	7532.8	7286.8
65°	13260.0	10423.2	8348.8	6836.9	5790.2	5201.1	4779.7	4499.4
67.5°	10243.9	6964.7	4846.4	3359.4	2547.1	2156.3	1883.7	1706.4
70°	5164.9	2671.0	1618.6	1142.0	976.2	907.6	861.7	835.0
72.5°	1515.7	1012.4	840.8	743.6	684.5	642.5	615.8	602.5
75°	838.9	684.5	604.4	549.1	511.0	482.3	465.2	453.8
77.5°	577.7	497.6	457.6	421.4	390.9	369.9	356.5	345.0
80°	404.2	364.2	347.0	328.0	305.0	287.9	268.8	261.2
82.5°	268.8	251.6	247.9	232.6	219.2	200.2	165.8	154.5
85°	158.3	156.3	156.3	150.6	141.1	123.9	99.1	99.1
87.5°	55.2	57.2	59.1	62.9	61.0	51.5	41.9	40.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)