

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: P395085

Luminaire Tested: **LAS45S-T3-Switch-1**

Issue Date: 5/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P395085  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2004-740-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LAS45S-T3-Switch-1  
Description: AREA SITE SMALL HOUSING, TYPE III, WATTAGE SWITCH ON POSTION 1  
Light Source: (168) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18434 lumens  
Efficiency: N/A  
Efficacy: 136.1 lumens/watt  
Luminous Opening: Rectangular (W 0.71' x L: 0.6' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

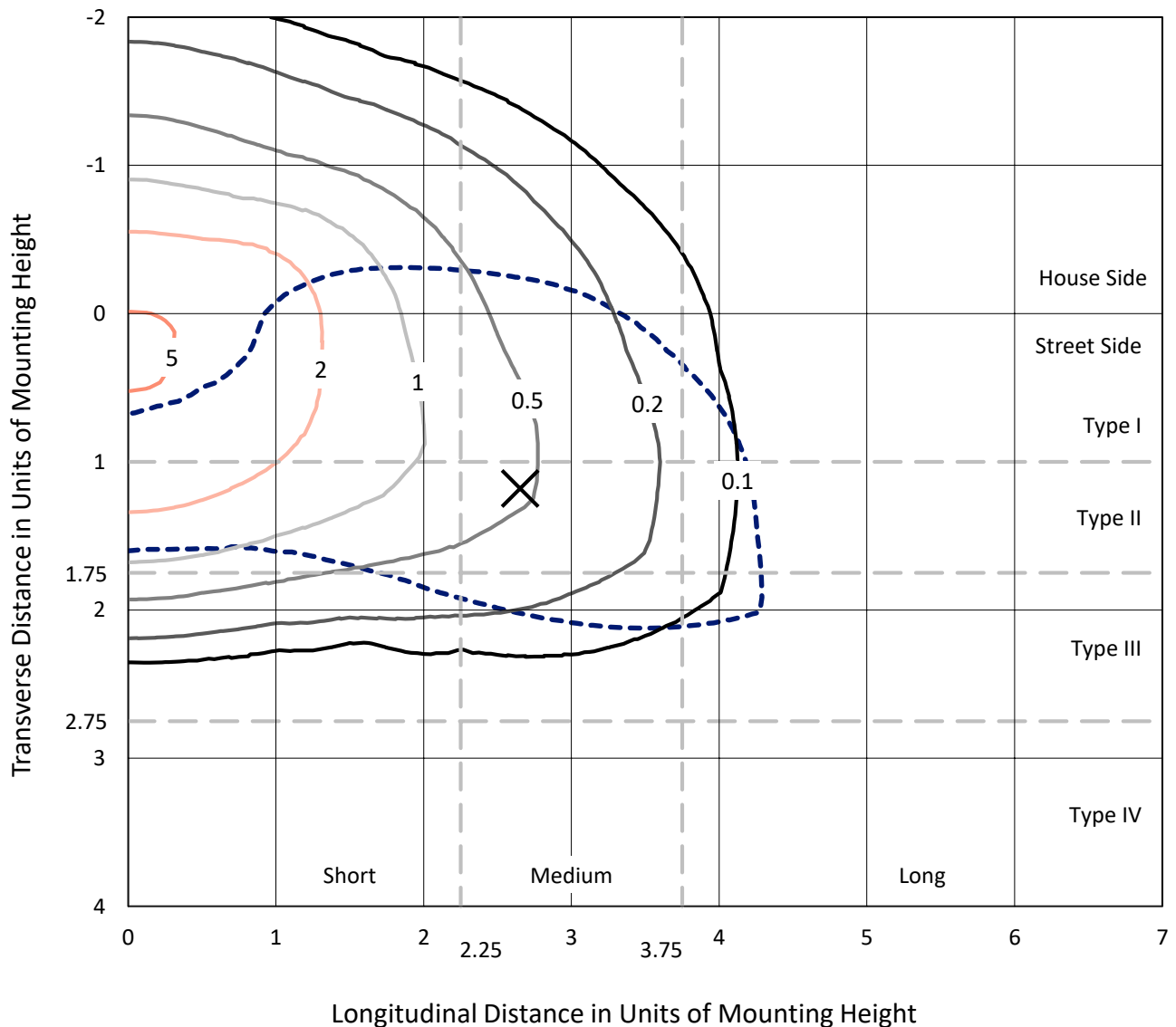
Input Watts (W): 135.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P395085  
 CATALOG NUMBER: LAS45S-T3-Switch-1

### Iso-Footcandle Lines of Horizontal Illumination

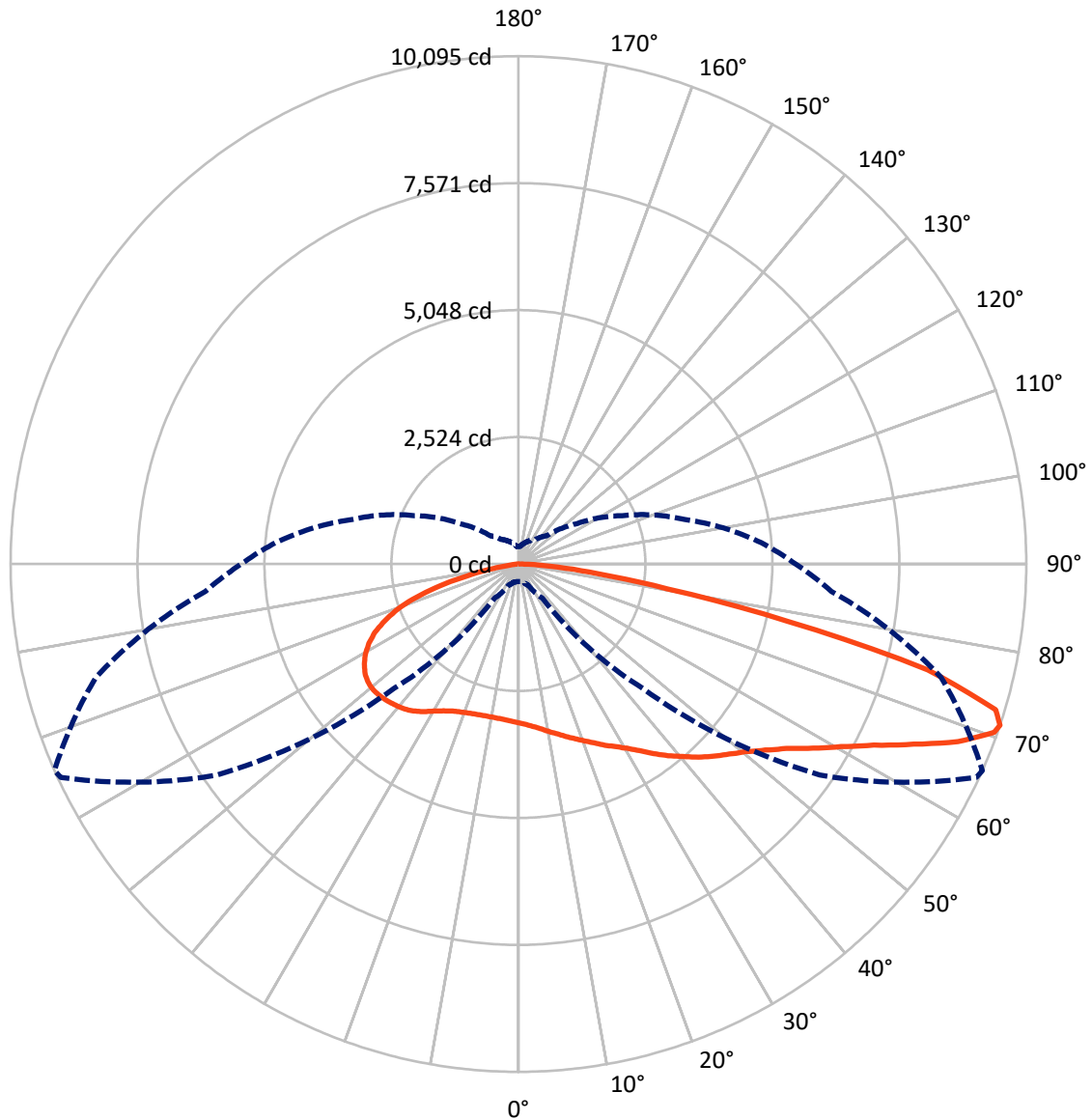
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P395085  
CATALOG NUMBER: LAS45S-T3-Switch-1

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P395085

CATALOG NUMBER: LAS45S-T3-Switch-1

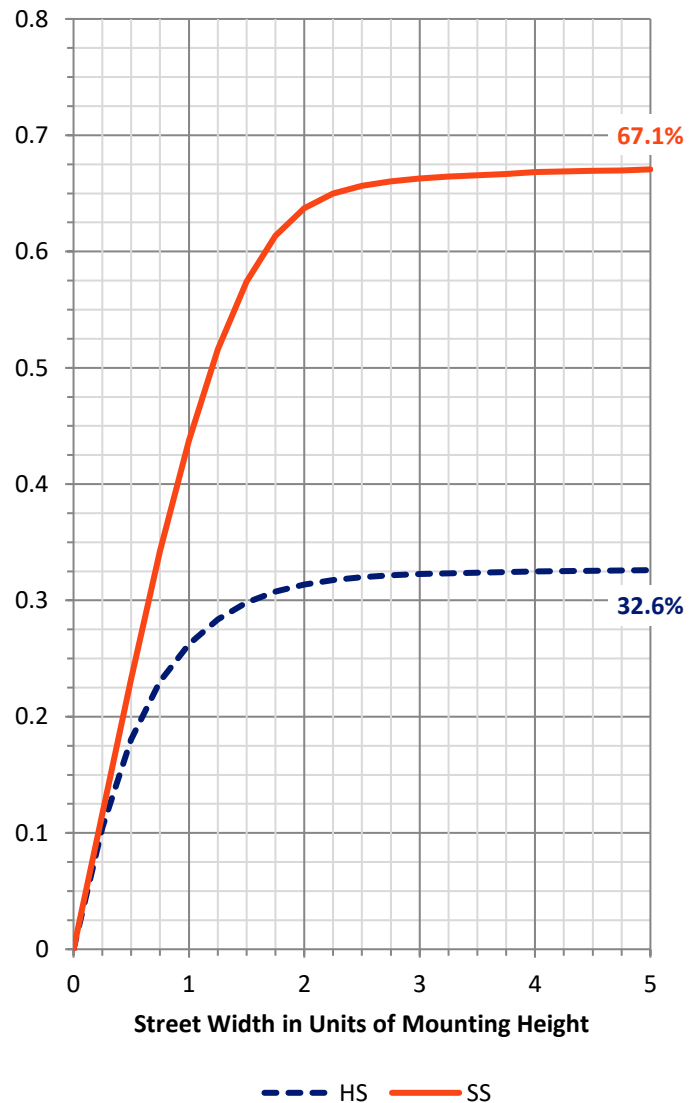
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6048.4	0.0	6048.4
	% Fixture	32.8	0.0	32.8
<b>Street Side</b>	Lumens	12385.6	0.0	12385.6
	% Fixture	67.2	0.0	67.2
<b>Total</b>	Lumens	18434.0	0.0	18434.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	303.2	1.6
10°-20°	916.9	5.0
20°-30°	1581.1	8.6
30°-40°	2374.7	12.9
40°-50°	3203.2	17.4
50°-60°	3922.2	21.3
60°-70°	3702.7	20.1
70°-80°	2142.9	11.6
80°-90°	287.2	1.6
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°	18434.0	100.0
0°-180°	18434.0	100.0



REPORT NUMBER: P395085

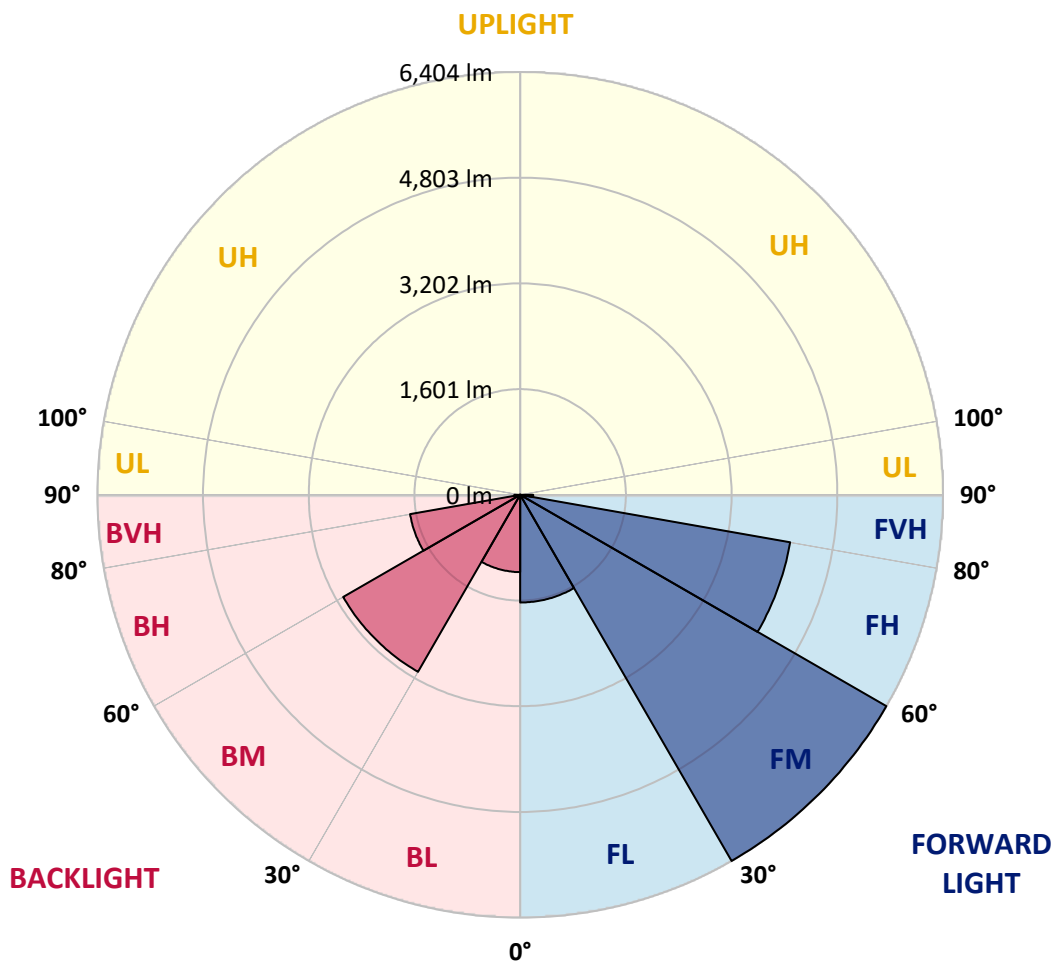
CATALOG NUMBER: LAS45S-T3-Switch-1

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1631.1	8.8			
FM	(30°-60°)	6404.0	34.7			
FH	(60°-80°)	4152.3	22.5			G2/5000
FVH	(80°-90°)	198.3	1.1			G2/225
BL	(0°-30°)	1170.1	6.3	B3/2500		
BM	(30°-60°)	3096.1	16.8	B3/5000		
BH	(60°-80°)	1693.3	9.2	B3/2500		G3/2500
BVH	(80°-90°)	88.9	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Medium





REPORT NUMBER: P395085  
 CATALOG NUMBER: LAS45S-T3-Switch-1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9
2.5°	3242.0	3240.4	3241.4	3237.7	3228.2	3224.5	3214.9	3199.1	3198.5	3184.8	3175.7
5°	3326.2	3324.6	3319.8	3314.0	3303.9	3299.2	3281.2	3251.5	3248.9	3229.3	3205.4
7.5°	3404.1	3403.5	3402.5	3391.3	3380.8	3368.6	3351.1	3320.4	3311.9	3283.8	3247.3
10°	3496.8	3492.0	3488.3	3478.8	3468.2	3452.8	3426.8	3391.9	3391.3	3353.2	3301.3
12.5°	3587.9	3590.0	3582.6	3573.6	3552.9	3539.1	3510.0	3477.7	3466.0	3427.9	3366.5
15°	3689.1	3690.1	3677.4	3670.0	3656.7	3636.6	3596.9	3559.8	3558.2	3509.5	3440.6
17.5°	3810.4	3815.7	3800.3	3790.2	3768.0	3737.8	3695.9	3655.7	3650.9	3601.7	3527.5
20°	3944.9	3938.6	3935.4	3915.3	3894.6	3854.9	3809.3	3763.2	3753.7	3700.2	3623.4
22.5°	4085.8	4084.2	4083.7	4056.2	4033.4	3977.2	3919.0	3872.3	3861.8	3808.2	3724.6
25°	4266.5	4271.8	4245.8	4224.1	4187.0	4114.4	4049.8	3983.1	3989.4	3929.6	3849.6
27.5°	4493.7	4493.7	4481.5	4447.1	4387.2	4285.5	4199.2	4112.8	4109.7	4060.9	3977.8
30°	4789.8	4787.7	4778.7	4745.9	4642.0	4523.9	4368.2	4265.9	4249.5	4184.9	4143.0
32.5°	4945.6	4953.5	4968.9	4962.0	4914.3	4799.9	4596.5	4427.0	4420.1	4347.5	4303.5
35°	5045.2	5053.1	5073.8	5094.4	5067.4	4994.3	4814.2	4647.3	4627.7	4520.2	4481.5
37.5°	5170.2	5172.3	5184.5	5213.1	5211.0	5155.4	5017.6	4853.9	4835.4	4712.0	4680.7
40°	5320.6	5321.2	5330.7	5351.4	5350.8	5300.0	5214.2	5060.0	5027.7	4925.5	4878.3
42.5°	5494.9	5480.6	5493.9	5512.4	5512.4	5473.7	5410.7	5260.8	5249.1	5128.3	5063.7
45°	5654.9	5649.1	5657.5	5667.6	5670.8	5651.7	5596.1	5465.8	5447.8	5320.1	5230.1
47.5°	5817.5	5811.7	5802.7	5837.7	5852.5	5875.8	5819.1	5666.0	5646.4	5476.4	5369.9
50°	5939.4	5935.7	5936.2	5973.3	6034.7	6096.7	6083.5	5898.6	5860.4	5637.9	5494.9
52.5°	5934.6	5929.8	5942.5	6031.5	6174.6	6329.8	6374.8	6183.6	6144.9	5839.2	5611.5
55°	5664.4	5678.2	5743.9	5962.1	6242.4	6582.5	6734.0	6541.1	6469.6	6076.0	5754.5
57.5°	5195.6	5169.1	5318.5	5640.6	6142.8	6752.0	7097.4	6949.0	6907.7	6353.6	5890.6
60°	4372.4	4368.2	4635.7	5070.1	5823.9	6808.1	7482.5	7440.6	7367.5	6682.0	6013.5
62.5°	3244.6	3260.0	3463.9	4155.8	5234.3	6636.5	7867.6	8005.3	7929.6	7069.8	6131.7
65°	1916.0	1920.8	2141.2	2795.9	4239.5	6171.9	8131.4	8706.7	8635.2	7568.3	6247.7
67.5°	803.6	851.3	997.5	1433.5	2900.3	5315.3	8135.1	9414.4	9422.9	8139.3	6347.8
70°	394.1	399.9	459.8	585.4	1208.3	4141.5	7645.6	9983.9	10030.0	8632.5	6328.7
71°	349.6	350.2	375.6	464.6	830.1	3502.1	7309.3	10038.4	10095.1	8696.1	6243.4
72.5°	310.4	309.9	325.3	362.3	537.7	2453.7	6481.8	9839.8	9919.2	8507.0	5989.2
75°	249.5	251.1	262.2	282.3	374.0	1114.6	4716.7	8298.3	8406.9	7203.3	4991.1
77.5°	190.2	194.4	208.7	224.1	279.7	674.3	2988.2	5654.4	5473.7	4578.5	3574.6
80°	142.5	144.1	153.6	170.6	205.5	422.7	1678.2	2927.8	3004.6	2415.6	1936.2
82.5°	99.1	102.2	109.7	118.1	133.0	267.5	1017.6	1585.0	1573.3	1035.6	755.9
85°	58.8	61.4	64.1	70.5	75.8	136.7	563.1	797.8	777.6	267.5	158.9
87.5°	21.7	22.8	25.4	23.8	27.5	45.0	193.4	199.7	194.9	46.1	33.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P395085

CATALOG NUMBER: LAS45S-T3-Switch-1

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9	3160.9
2.5°	3165.2	3161.4	3147.1	3130.7	3116.4	3105.8	3093.1	3083.6	3080.4	3070.9	3073.0
5°	3185.8	3174.2	3139.2	3105.8	3071.4	3042.3	3016.3	2996.2	2981.3	2970.2	2978.7
7.5°	3219.2	3197.5	3146.1	3088.9	3033.2	2986.1	2944.8	2905.6	2878.6	2869.6	2864.3
10°	3265.8	3236.1	3159.9	3078.8	3000.9	2930.5	2861.6	2813.9	2768.4	2749.8	2739.2
12.5°	3324.6	3281.7	3181.0	3077.7	2972.9	2871.7	2768.9	2696.9	2635.4	2615.3	2602.6
15°	3395.1	3341.0	3216.5	3083.6	2942.7	2794.9	2668.8	2570.8	2496.1	2468.0	2460.6
17.5°	3470.8	3408.3	3259.4	3094.2	2911.9	2722.3	2568.1	2449.5	2367.4	2335.1	2334.0
20°	3564.0	3493.6	3314.0	3115.4	2881.2	2650.8	2468.0	2338.8	2254.5	2213.2	2205.8
22.5°	3671.6	3591.1	3388.2	3139.7	2855.8	2578.2	2373.2	2225.4	2139.1	2102.0	2093.5
25°	3784.9	3697.5	3477.2	3180.0	2833.5	2517.8	2284.2	2131.6	2042.6	2001.3	1992.9
27.5°	3926.4	3830.0	3582.1	3241.4	2822.4	2461.1	2207.9	2043.7	1953.7	1905.4	1902.3
30°	4085.3	3991.0	3721.9	3313.5	2826.7	2415.6	2142.2	1966.4	1868.9	1822.3	1810.6
32.5°	4252.7	4163.2	3870.2	3412.5	2837.8	2373.7	2075.5	1888.0	1786.3	1736.5	1729.0
35°	4438.1	4353.3	4027.0	3502.1	2843.1	2320.8	1997.1	1809.6	1705.7	1662.3	1653.8
37.5°	4637.3	4539.8	4187.5	3573.0	2829.3	2254.0	1920.3	1739.1	1639.5	1600.9	1596.1
40°	4829.6	4722.6	4316.8	3622.3	2806.0	2188.3	1852.5	1677.7	1589.7	1556.9	1551.1
42.5°	4998.6	4878.8	4415.9	3661.5	2780.6	2129.5	1796.3	1632.6	1554.8	1526.2	1520.9
45°	5154.8	5015.0	4513.9	3696.5	2756.2	2076.6	1754.5	1599.3	1527.2	1501.8	1498.6
47.5°	5279.8	5138.4	4592.8	3720.3	2721.8	2034.7	1716.9	1570.1	1506.0	1486.4	1484.8
50°	5404.3	5246.5	4660.1	3724.0	2683.6	1993.4	1684.0	1543.6	1487.0	1473.7	1473.7
52.5°	5514.0	5341.8	4707.2	3698.6	2630.1	1946.8	1643.8	1514.0	1464.7	1461.0	1462.1
55°	5621.5	5430.3	4719.4	3638.7	2568.1	1900.2	1599.3	1473.7	1430.3	1432.9	1435.0
57.5°	5711.0	5470.0	4685.5	3536.5	2493.5	1834.5	1538.9	1410.1	1359.8	1361.4	1366.2
60°	5761.9	5463.7	4601.3	3409.9	2386.4	1747.6	1449.3	1308.4	1236.4	1223.2	1230.0
62.5°	5788.9	5421.8	4458.8	3243.0	2260.9	1632.6	1306.3	1142.6	1055.2	1062.6	1057.3
65°	5787.3	5347.1	4269.1	3040.1	2090.3	1444.1	1116.7	945.6	886.8	867.7	866.1
67.5°	5750.2	5206.2	3997.9	2758.8	1860.4	1202.5	890.0	754.3	694.5	692.4	685.5
70°	5608.3	4980.0	3631.8	2440.5	1529.9	899.0	679.6	568.4	514.9	449.2	446.6
71°	5509.7	4845.5	3418.4	2277.9	1381.0	794.6	598.6	508.5	425.4	346.4	346.4
72.5°	5219.5	4595.4	3123.8	2023.0	1125.7	650.0	494.2	408.4	289.8	271.8	272.8
75°	4531.9	3929.0	2556.0	1519.3	761.2	446.0	344.9	267.5	198.6	216.1	222.0
77.5°	3407.8	2999.3	1899.6	956.2	433.3	284.5	238.4	175.9	157.9	178.0	177.5
80°	1953.1	1862.5	1171.2	511.2	189.1	179.0	168.5	128.2	120.8	135.1	135.1
82.5°	960.9	1032.4	639.9	190.7	86.9	104.4	108.1	89.5	84.2	91.1	93.2
85°	315.2	455.0	235.7	68.3	49.8	51.9	47.7	46.1	45.6	47.1	46.6
87.5°	45.6	82.1	33.9	26.5	20.7	18.0	14.8	13.8	11.7	10.1	9.5
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)