

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: P395087

Luminaire Tested: **LAS45S-T3-Switch-3**

Issue Date: 5/3/2020

Test Information

Test Method: LM-79-08
Report Number: P395087
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-3
Description: AREA SITE SMALL HOUSING, TYPE III, WATTAGE SWITCH ON POSTION 3
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14515 lumens
Efficiency: N/A
Efficacy: 146.3 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

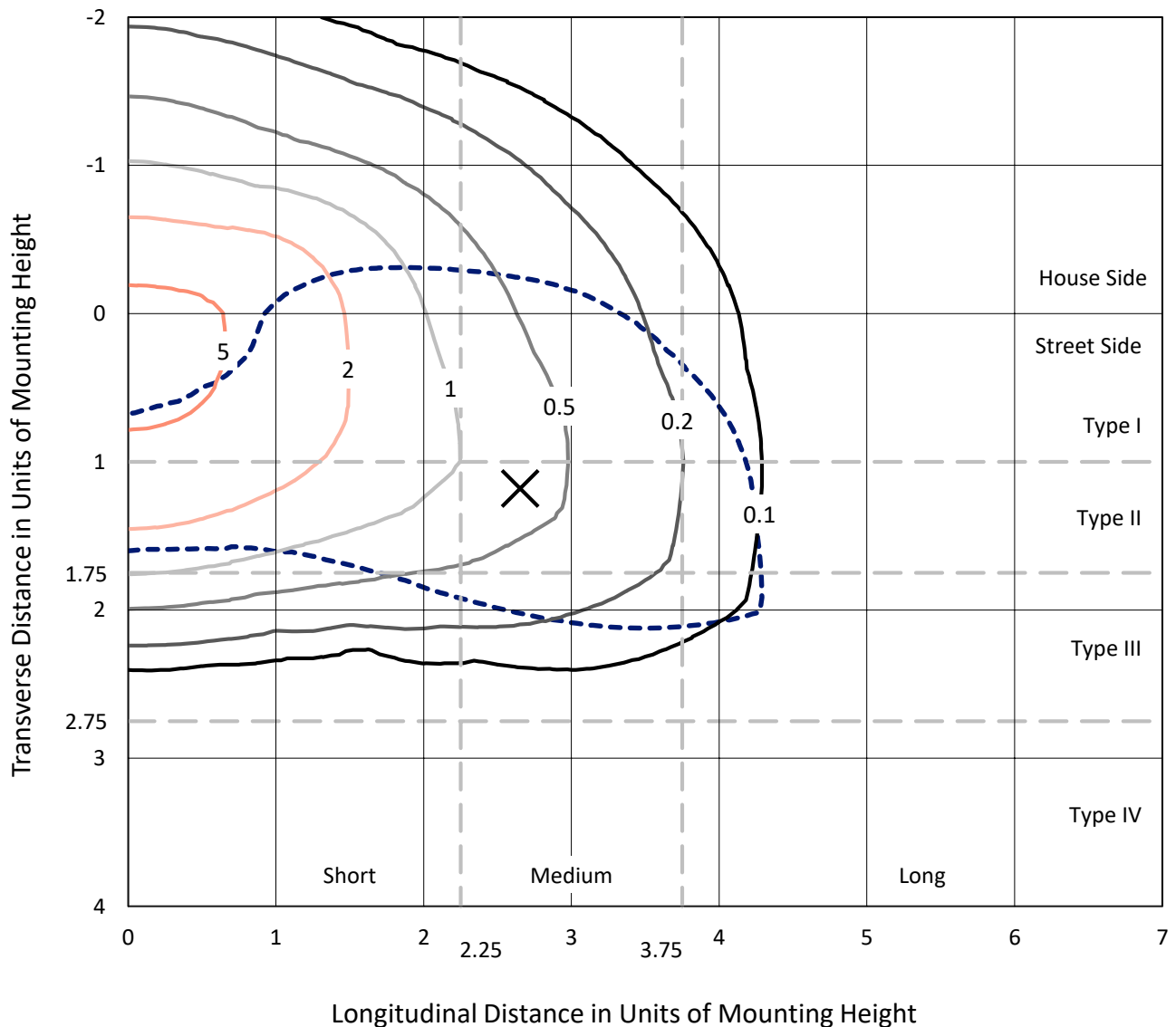
Input Watts (W): 99.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

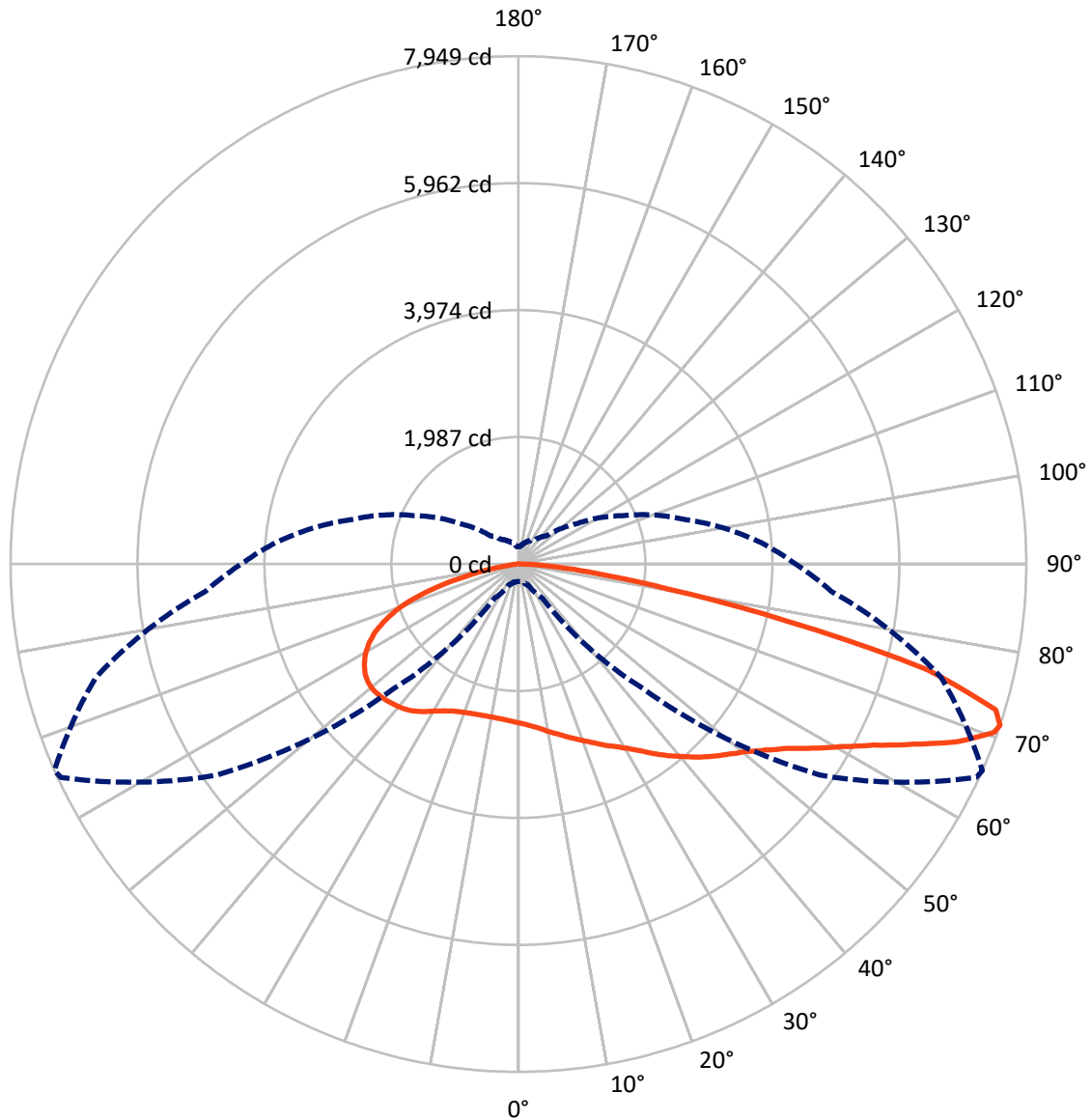
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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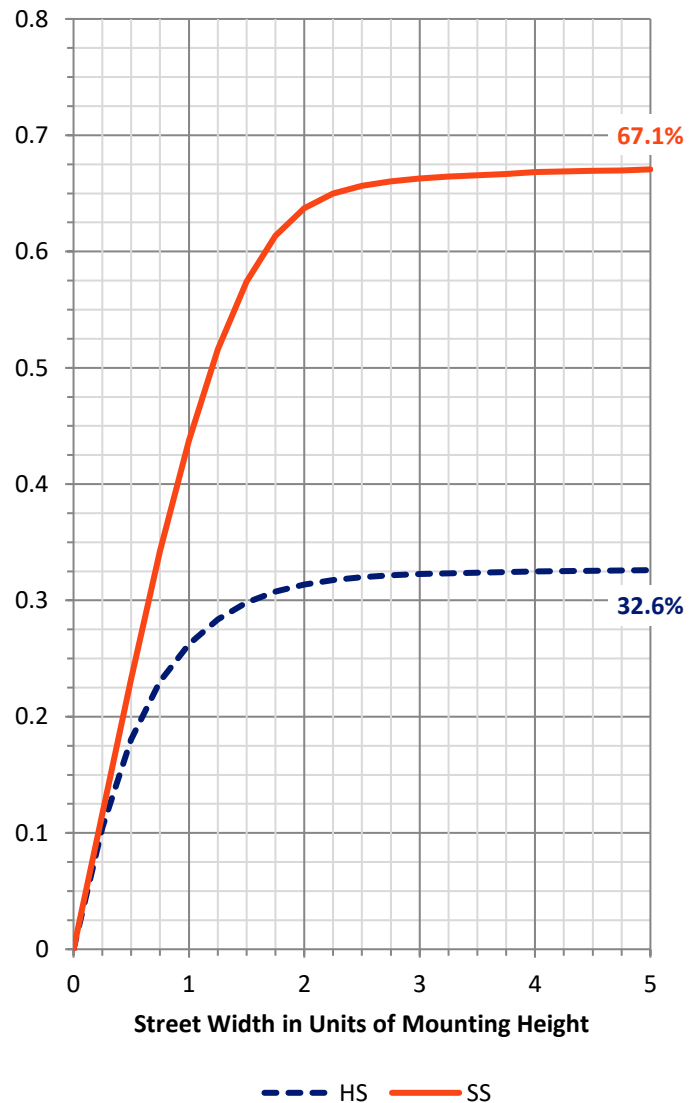
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4762.5	0.0	4762.5
	% Fixture	32.8	0.0	32.8
Street Side	Lumens	9752.5	0.0	9752.5
	% Fixture	67.2	0.0	67.2
Total	Lumens	14515.0	0.0	14515.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.7	1.6
10°-20°	722.0	5.0
20°-30°	1244.9	8.6
30°-40°	1869.9	12.9
40°-50°	2522.2	17.4
50°-60°	3088.3	21.3
60°-70°	2915.5	20.1
70°-80°	1687.3	11.6
80°-90°	226.1	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°	14515.0	100.0
0°-180°	14515.0	100.0



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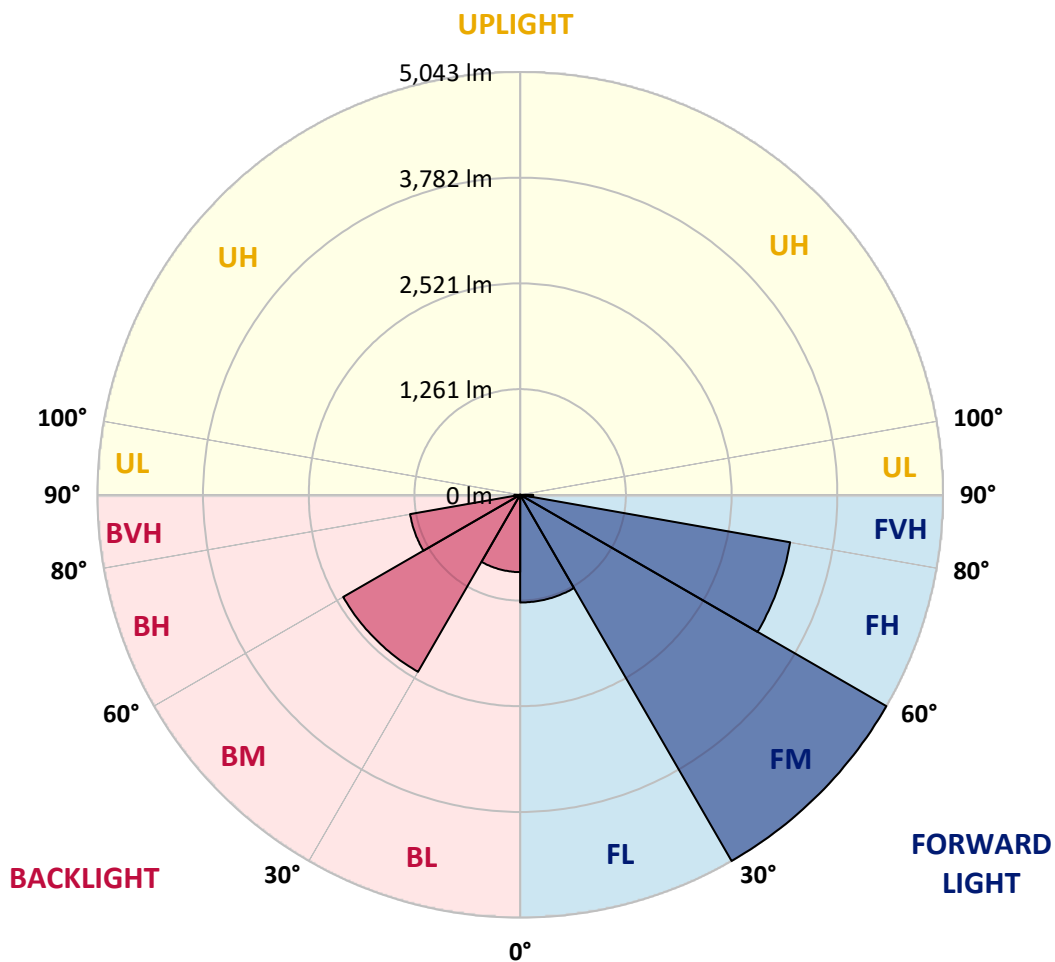
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1284.3	8.8			
FM (30°-60°)	5042.5	34.7			
FH (60°-80°)	3269.5	22.5			G2/5000
FVH (80°-90°)	156.1	1.1			G2/225
BL (0°-30°)	921.3	6.3	B2/1000		
BM (30°-60°)	2437.8	16.8	B2/2500		
BH (60°-80°)	1333.3	9.2	B3/2500		G3/2500
BVH (80°-90°)	70.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9
2.5°	2552.7	2551.5	2552.3	2549.4	2541.9	2539.0	2531.5	2518.9	2518.5	2507.7	2500.6
5°	2619.1	2617.8	2614.1	2609.5	2601.5	2597.8	2583.6	2560.2	2558.2	2542.7	2524.0
7.5°	2680.4	2680.0	2679.1	2670.4	2662.0	2652.4	2638.7	2614.5	2607.8	2585.7	2556.9
10°	2753.4	2749.6	2746.7	2739.2	2730.8	2718.7	2698.3	2670.8	2670.4	2640.3	2599.5
12.5°	2825.1	2826.8	2820.9	2813.8	2797.6	2786.7	2763.8	2738.4	2729.2	2699.1	2650.8
15°	2904.8	2905.6	2895.6	2889.8	2879.3	2863.5	2832.2	2803.0	2801.8	2763.4	2709.2
17.5°	3000.3	3004.5	2992.4	2984.4	2966.9	2943.2	2910.2	2878.5	2874.7	2836.0	2777.6
20°	3106.2	3101.2	3098.7	3082.9	3066.6	3035.3	2999.5	2963.2	2955.7	2913.5	2853.1
22.5°	3217.2	3215.9	3215.5	3193.8	3175.9	3131.7	3085.8	3049.1	3040.8	2998.6	2932.7
25°	3359.4	3363.6	3343.2	3326.1	3296.9	3239.7	3188.8	3136.3	3141.3	3094.1	3031.2
27.5°	3538.4	3538.4	3528.8	3501.7	3454.5	3374.4	3306.5	3238.5	3236.0	3197.6	3132.1
30°	3771.5	3769.9	3762.8	3736.9	3655.2	3562.1	3439.5	3359.0	3346.1	3295.2	3262.2
32.5°	3894.2	3900.4	3912.5	3907.1	3869.6	3779.5	3619.3	3485.8	3480.4	3423.3	3388.6
35°	3972.6	3978.8	3995.1	4011.4	3990.1	3932.5	3790.7	3659.3	3643.9	3559.2	3528.8
37.5°	4071.0	4072.7	4082.3	4104.8	4103.1	4059.3	3950.9	3822.0	3807.4	3710.2	3685.6
40°	4189.5	4189.9	4197.4	4213.7	4213.3	4173.2	4105.6	3984.3	3958.8	3878.3	3841.2
42.5°	4326.7	4315.5	4325.9	4340.5	4340.5	4310.0	4260.4	4142.4	4133.2	4038.1	3987.2
45°	4452.7	4448.1	4454.8	4462.7	4465.2	4450.2	4406.4	4303.8	4289.6	4189.1	4118.2
47.5°	4580.7	4576.2	4569.1	4596.6	4608.3	4626.6	4582.0	4461.4	4446.0	4312.1	4228.3
50°	4676.7	4673.8	4674.2	4703.4	4751.8	4800.6	4790.1	4644.6	4614.5	4439.3	4326.7
52.5°	4672.9	4669.2	4679.2	4749.3	4861.9	4984.1	5019.5	4869.0	4838.5	4597.8	4418.5
55°	4460.2	4471.0	4522.8	4694.6	4915.3	5183.1	5302.3	5150.5	5094.2	4784.3	4531.1
57.5°	4091.0	4070.2	4187.8	4441.4	4836.8	5316.5	5588.5	5471.7	5439.2	5002.9	4638.3
60°	3442.9	3439.5	3650.2	3992.2	4585.7	5360.7	5891.7	5858.8	5801.2	5261.5	4735.1
62.5°	2554.8	2566.9	2727.5	3272.3	4121.5	5225.6	6195.0	6303.4	6243.8	5566.8	4828.1
65°	1508.7	1512.5	1686.0	2201.5	3338.2	4859.8	6402.7	6855.7	6799.4	5959.3	4919.4
67.5°	632.8	670.3	785.4	1128.7	2283.7	4185.3	6405.6	7412.9	7419.6	6408.9	4998.3
70°	310.3	314.9	362.1	460.9	951.4	3261.0	6020.2	7861.3	7897.6	6797.3	4983.3
71°	275.3	275.7	295.7	365.8	653.6	2757.5	5755.3	7904.3	7948.9	6847.3	4916.1
72.5°	244.4	244.0	256.1	285.3	423.4	1932.1	5103.8	7747.9	7810.5	6698.4	4715.9
75°	196.5	197.7	206.5	222.3	294.5	877.6	3714.0	6534.1	6619.6	5671.9	3930.0
77.5°	149.7	153.1	164.3	176.4	220.2	531.0	2352.9	4452.3	4310.0	3605.1	2814.7
80°	112.2	113.5	121.0	134.3	161.8	332.9	1321.4	2305.4	2365.9	1902.0	1524.5
82.5°	78.0	80.5	86.3	93.0	104.7	210.6	801.3	1248.0	1238.8	815.5	595.2
85°	46.3	48.4	50.5	55.5	59.6	107.6	443.4	628.2	612.3	210.6	125.1
87.5°	17.1	17.9	20.0	18.8	21.7	35.5	152.2	157.3	153.5	36.3	26.7
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°	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9
2.5°	2492.3	2489.3	2478.1	2465.1	2453.9	2445.5	2435.5	2428.0	2425.5	2418.0	2419.7
5°	2508.5	2499.3	2471.8	2445.5	2418.4	2395.5	2375.0	2359.2	2347.5	2338.8	2345.4
7.5°	2534.8	2517.7	2477.2	2432.2	2388.4	2351.3	2318.7	2287.9	2266.6	2259.5	2255.3
10°	2571.5	2548.1	2488.1	2424.3	2362.9	2307.5	2253.2	2215.7	2179.8	2165.2	2156.9
12.5°	2617.8	2584.0	2504.8	2423.4	2340.8	2261.2	2180.3	2123.5	2075.1	2059.3	2049.3
15°	2673.3	2630.7	2532.7	2428.0	2317.1	2200.7	2101.4	2024.3	1965.4	1943.3	1937.5
17.5°	2732.9	2683.7	2566.5	2436.4	2292.9	2143.5	2022.2	1928.7	1864.1	1838.6	1837.8
20°	2806.3	2750.9	2609.5	2453.0	2268.7	2087.2	1943.3	1841.6	1775.2	1742.7	1736.9
22.5°	2891.0	2827.6	2667.9	2472.2	2248.7	2030.1	1868.7	1752.3	1684.3	1655.1	1648.4
25°	2980.3	2911.5	2737.9	2503.9	2231.1	1982.5	1798.6	1678.5	1608.4	1575.9	1569.2
27.5°	3091.6	3015.7	2820.5	2552.3	2222.4	1937.9	1738.5	1609.2	1538.3	1500.4	1497.9
30°	3216.8	3142.5	2930.6	2609.0	2225.7	1902.0	1686.8	1548.3	1471.6	1434.9	1425.7
32.5°	3348.6	3278.1	3047.4	2687.0	2234.5	1869.1	1634.3	1486.6	1406.5	1367.3	1361.5
35°	3494.6	3427.8	3170.9	2757.5	2238.6	1827.4	1572.5	1424.9	1343.1	1308.9	1302.2
37.5°	3651.4	3574.7	3297.3	2813.4	2227.8	1774.8	1512.0	1369.4	1291.0	1260.5	1256.8
40°	3802.8	3718.6	3399.1	2852.2	2209.5	1723.1	1458.6	1321.0	1251.8	1225.9	1221.3
42.5°	3935.9	3841.6	3477.1	2883.1	2189.4	1676.8	1414.4	1285.5	1224.2	1201.7	1197.5
45°	4058.9	3948.8	3554.2	2910.6	2170.2	1635.1	1381.5	1259.3	1202.5	1182.5	1180.0
47.5°	4157.4	4046.0	3616.4	2929.4	2143.1	1602.1	1351.9	1236.3	1185.9	1170.4	1169.2
50°	4255.4	4131.1	3669.3	2932.3	2113.1	1569.6	1326.0	1215.5	1170.8	1160.4	1160.4
52.5°	4341.7	4206.2	3706.5	2912.3	2071.0	1532.9	1294.3	1192.1	1153.3	1150.4	1151.2
55°	4426.4	4275.8	3716.1	2865.2	2022.2	1496.2	1259.3	1160.4	1126.2	1128.3	1130.0
57.5°	4496.9	4307.1	3689.4	2784.6	1963.4	1444.5	1211.7	1110.4	1070.7	1072.0	1075.7
60°	4536.9	4302.1	3623.0	2685.0	1879.1	1376.1	1141.2	1030.3	973.5	963.1	968.5
62.5°	4558.2	4269.2	3510.8	2553.6	1780.2	1285.5	1028.6	899.7	830.9	836.7	832.6
65°	4557.0	4210.3	3361.5	2393.8	1645.9	1137.1	879.3	744.5	698.2	683.2	682.0
67.5°	4527.8	4099.4	3148.0	2172.3	1464.9	946.8	700.8	594.0	546.8	545.2	539.7
70°	4416.0	3921.3	2859.7	1921.6	1204.6	707.8	535.2	447.6	405.4	353.7	351.6
71°	4338.4	3815.3	2691.6	1793.6	1087.4	625.7	471.3	400.4	334.9	272.8	272.8
72.5°	4109.8	3618.5	2459.7	1593.0	886.4	511.8	389.2	321.6	228.2	214.0	214.8
75°	3568.4	3093.7	2012.6	1196.3	599.4	351.2	271.5	210.6	156.4	170.2	174.8
77.5°	2683.3	2361.7	1495.8	752.9	341.2	224.0	187.7	138.5	124.3	140.2	139.7
80°	1537.9	1466.6	922.2	402.5	148.9	141.0	132.6	100.9	95.1	106.4	106.4
82.5°	756.6	813.0	503.9	150.2	68.4	82.2	85.1	70.5	66.3	71.7	73.4
85°	248.2	358.3	185.6	53.8	39.2	40.9	37.5	36.3	35.9	37.1	36.7
87.5°	35.9	64.7	26.7	20.9	16.3	14.2	11.7	10.8	9.2	7.9	7.5
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)