

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: P395089

Luminaire Tested: **LAS45S-T3-Switch-5**

Issue Date: 5/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P395089  
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-5  
Description: AREA SITE SMALL HOUSING, TYPE III, WATTAGE SWITCH ON POSTION 5  
Light Source: (168) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

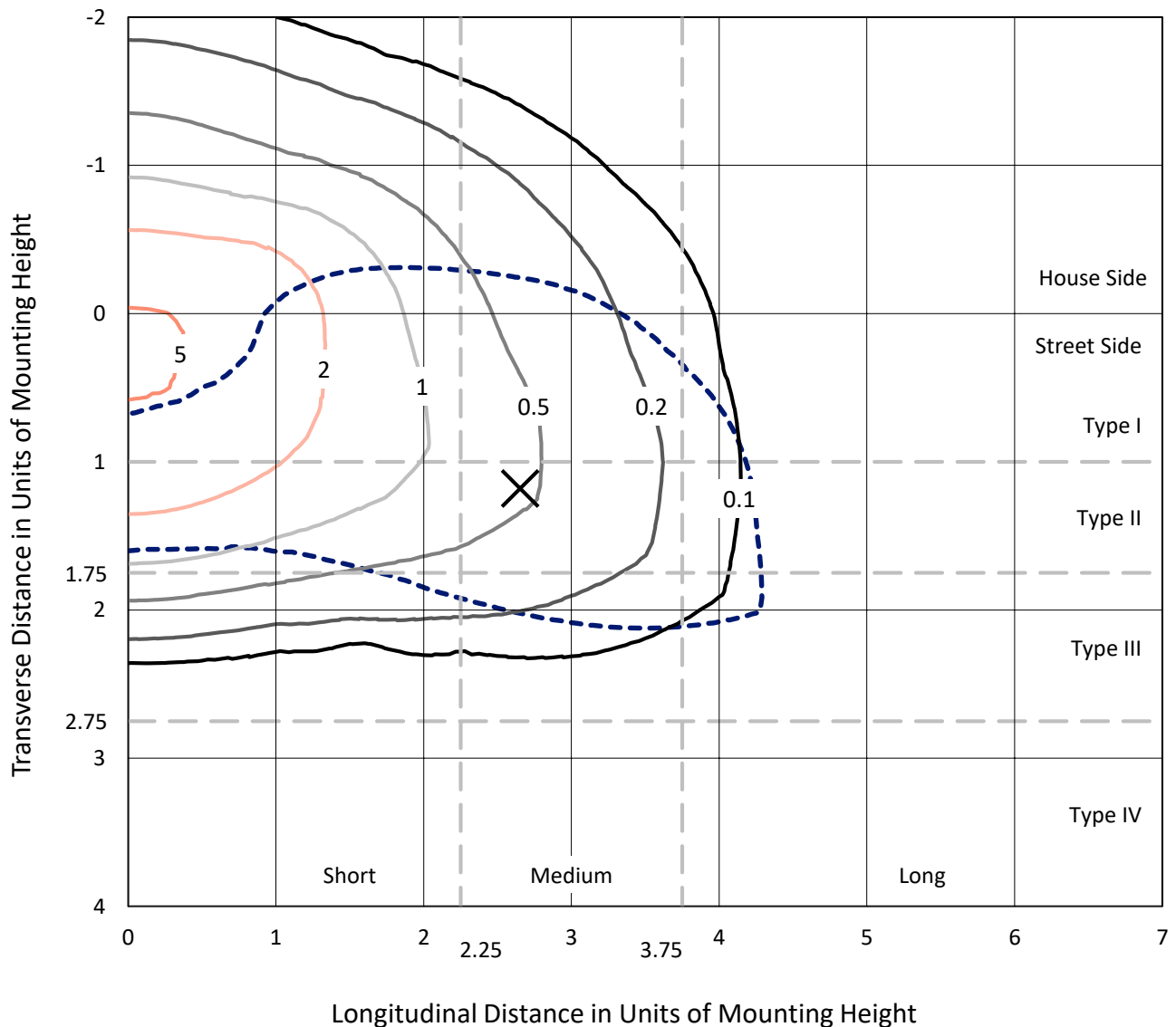
Lumens per Lamp: N/A  
Luminaire Lumens: 12083 lumens  
Efficiency: N/A  
Efficacy: 152.6 lumens/watt  
Luminous Opening: Rectangular (W 0.71' x L: 0.6' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 79.2  
Input Voltage (V): NR  
Input 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

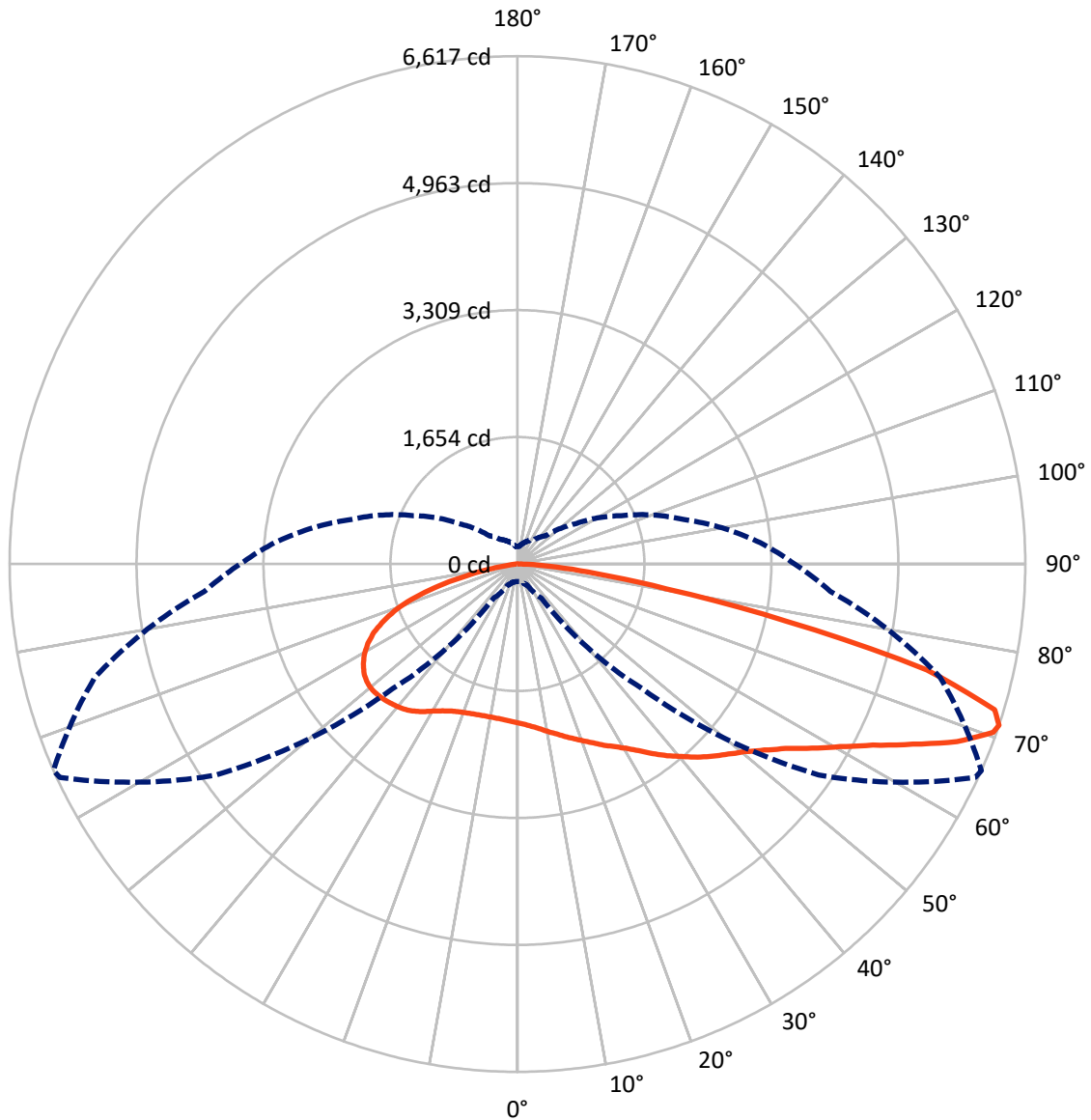
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.5 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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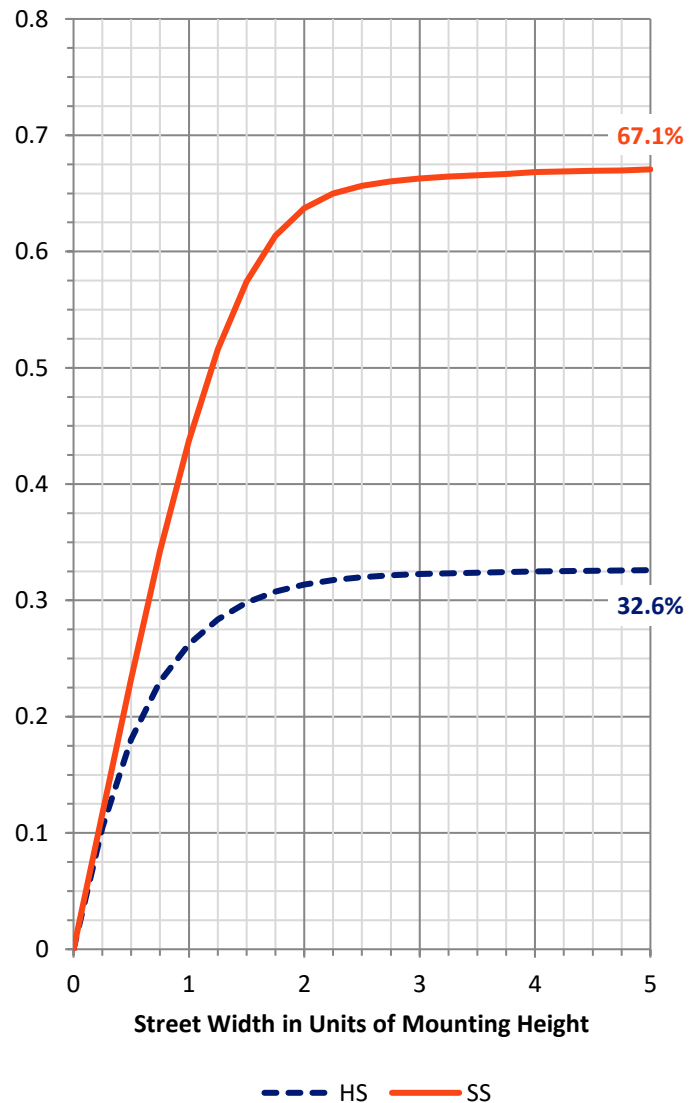
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3964.5	0.0	3964.5
	% Fixture	32.8	0.0	32.8
<b>Street Side</b>	Lumens	8118.4	0.0	8118.4
	% Fixture	67.2	0.0	67.2
<b>Total</b>	Lumens	12083.0	0.0	12083.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.7	1.6
10°-20°	601.0	5.0
20°-30°	1036.3	8.6
30°-40°	1556.6	12.9
40°-50°	2099.6	17.4
50°-60°	2570.9	21.3
60°-70°	2427.0	20.1
70°-80°	1404.6	11.6
80°-90°	188.2	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°	12083.0	100.0
0°-180°	12083.0	100.0



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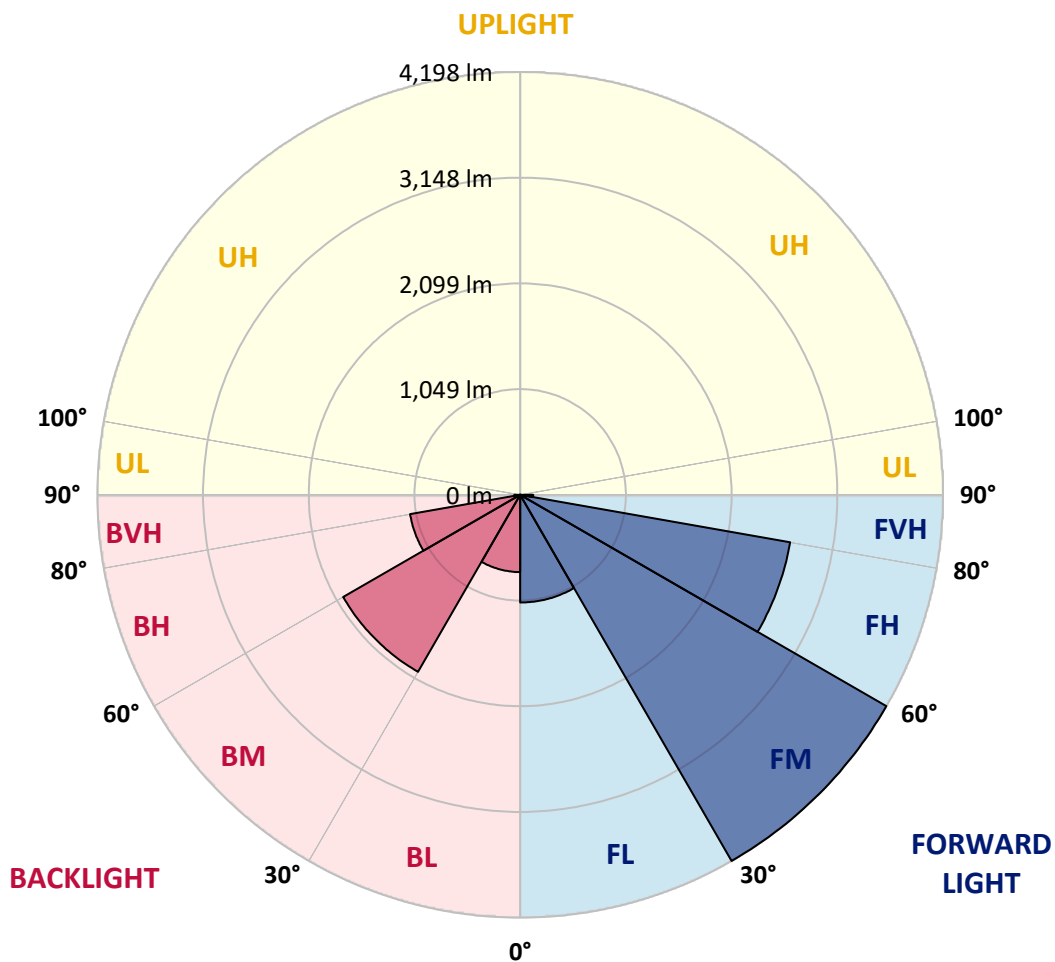
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1069.1	8.8			
FM (30°-60°)	4197.7	34.7			
FH (60°-80°)	2721.7	22.5			G2/5000
FVH (80°-90°)	130.0	1.1			G2/225
BL (0°-30°)	767.0	6.3	B2/1000		
BM (30°-60°)	2029.4	16.8	B2/2500		
BH (60°-80°)	1110.0	9.2	B3/2500		G3/2500
BVH (80°-90°)	58.3	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°	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9
2.5°	2125.0	2124.0	2124.7	2122.2	2116.0	2113.6	2107.3	2096.9	2096.5	2087.5	2081.6
5°	2180.2	2179.2	2176.1	2172.2	2165.6	2162.5	2150.7	2131.3	2129.5	2116.7	2101.1
7.5°	2231.3	2230.9	2230.2	2222.9	2216.0	2208.0	2196.6	2176.4	2170.9	2152.5	2128.5
10°	2292.0	2288.9	2286.5	2280.2	2273.3	2263.2	2246.2	2223.3	2222.9	2197.9	2163.9
12.5°	2351.8	2353.1	2348.3	2342.4	2328.8	2319.8	2300.7	2279.5	2271.9	2246.9	2206.6
15°	2418.1	2418.8	2410.4	2405.6	2396.9	2383.7	2357.7	2333.4	2332.3	2300.4	2255.2
17.5°	2497.6	2501.1	2491.0	2484.4	2469.8	2450.0	2422.6	2396.2	2393.1	2360.8	2312.2
20°	2585.8	2581.6	2579.5	2566.3	2552.8	2526.8	2496.9	2466.7	2460.4	2425.4	2375.0
22.5°	2678.2	2677.1	2676.8	2658.7	2643.8	2607.0	2568.8	2538.2	2531.3	2496.2	2441.3
25°	2796.6	2800.0	2783.0	2768.8	2744.5	2696.9	2654.5	2610.8	2615.0	2575.7	2523.3
27.5°	2945.5	2945.5	2937.5	2915.0	2875.7	2809.1	2752.5	2695.9	2693.8	2661.8	2607.3
30°	3139.6	3138.2	3132.3	3110.8	3042.7	2965.3	2863.2	2796.2	2785.4	2743.1	2715.7
32.5°	3241.7	3246.9	3257.0	3252.5	3221.2	3146.2	3012.9	2901.8	2897.3	2849.7	2820.9
35°	3307.0	3312.2	3325.7	3339.3	3321.6	3273.6	3155.6	3046.2	3033.4	2962.9	2937.5
37.5°	3388.9	3390.3	3398.3	3417.0	3415.7	3379.2	3288.9	3181.6	3169.5	3088.6	3068.1
40°	3487.5	3487.9	3494.1	3507.7	3507.3	3474.0	3417.7	3316.7	3295.5	3228.5	3197.6
42.5°	3601.8	3592.4	3601.1	3613.2	3613.2	3587.9	3546.6	3448.3	3440.7	3361.5	3319.1
45°	3706.6	3702.8	3708.4	3715.0	3717.1	3704.6	3668.1	3582.7	3570.9	3487.2	3428.2
47.5°	3813.2	3809.4	3803.5	3826.4	3836.2	3851.4	3814.3	3713.9	3701.1	3589.6	3519.8
50°	3893.1	3890.7	3891.0	3915.3	3955.6	3996.2	3987.5	3866.4	3841.4	3695.5	3601.8
52.5°	3890.0	3886.8	3895.2	3953.5	4047.3	4149.0	4178.5	4053.2	4027.8	3827.5	3678.2
55°	3712.9	3721.9	3765.0	3908.0	4091.7	4314.6	4413.9	4287.5	4240.7	3982.7	3771.9
57.5°	3405.6	3388.2	3486.1	3697.3	4026.4	4425.7	4652.1	4554.9	4527.8	4164.6	3861.2
60°	2866.0	2863.2	3038.6	3323.3	3817.4	4462.5	4904.6	4877.1	4829.2	4379.9	3941.7
62.5°	2126.8	2136.8	2270.5	2724.0	3430.9	4350.0	5157.0	5247.3	5197.6	4634.1	4019.1
65°	1255.9	1259.0	1403.5	1832.7	2778.8	4045.5	5329.9	5707.0	5660.1	4960.8	4095.2
67.5°	526.7	558.0	653.8	939.6	1901.1	3484.1	5332.3	6170.9	6176.5	5335.1	4160.8
70°	258.3	262.2	301.4	383.7	792.0	2714.6	5011.5	6544.2	6574.4	5658.4	4148.3
71°	229.2	229.5	246.2	304.5	544.1	2295.5	4791.0	6579.9	6617.1	5700.1	4092.4
72.5°	203.5	203.1	213.2	237.5	352.4	1608.3	4248.7	6449.7	6501.8	5576.1	3925.7
75°	163.5	164.6	171.9	185.1	245.1	730.6	3091.7	5439.3	5510.5	4721.6	3271.6
77.5°	124.7	127.4	136.8	146.9	183.3	442.0	1958.7	3706.3	3587.9	3001.1	2343.1
80°	93.4	94.4	100.7	111.8	134.7	277.1	1100.0	1919.1	1969.5	1583.3	1269.1
82.5°	64.9	67.0	71.9	77.4	87.2	175.3	667.0	1038.9	1031.3	678.8	495.5
85°	38.5	40.3	42.0	46.2	49.7	89.6	369.1	522.9	509.7	175.3	104.2
87.5°	14.2	14.9	16.7	15.6	18.1	29.5	126.7	130.9	127.8	30.2	22.2
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°	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9	2071.9
2.5°	2074.7	2072.2	2062.9	2052.1	2042.7	2035.8	2027.5	2021.2	2019.1	2012.9	2014.3
5°	2088.2	2080.6	2057.7	2035.8	2013.2	1994.1	1977.1	1963.9	1954.2	1946.9	1952.5
7.5°	2110.1	2095.9	2062.2	2024.7	1988.2	1957.3	1930.2	1904.5	1886.8	1880.9	1877.4
10°	2140.6	2121.2	2071.2	2018.1	1967.0	1920.9	1875.7	1844.5	1814.6	1802.4	1795.5
12.5°	2179.2	2151.1	2085.1	2017.4	1948.6	1882.3	1814.9	1767.7	1727.4	1714.3	1705.9
15°	2225.4	2190.0	2108.4	2021.2	1928.8	1832.0	1749.3	1685.1	1636.1	1617.7	1612.9
17.5°	2275.0	2234.1	2136.5	2028.1	1908.7	1784.4	1683.4	1605.6	1551.8	1530.6	1529.9
20°	2336.1	2290.0	2172.2	2042.0	1888.6	1737.5	1617.7	1533.0	1477.8	1450.7	1445.8
22.5°	2406.6	2353.8	2220.9	2058.0	1871.9	1689.9	1555.6	1458.7	1402.1	1377.8	1372.2
25°	2480.9	2423.6	2279.2	2084.4	1857.3	1650.4	1497.2	1397.2	1338.9	1311.8	1306.3
27.5°	2573.6	2510.4	2347.9	2124.7	1850.0	1613.2	1447.2	1339.6	1280.6	1249.0	1246.9
30°	2677.8	2616.0	2439.6	2171.9	1852.8	1583.3	1404.2	1288.9	1225.0	1194.5	1186.8
32.5°	2787.5	2728.8	2536.8	2236.8	1860.1	1555.9	1360.4	1237.5	1170.8	1138.2	1133.3
35°	2909.1	2853.5	2639.6	2295.5	1863.6	1521.2	1309.0	1186.1	1118.1	1089.6	1084.0
37.5°	3039.6	2975.7	2744.8	2342.0	1854.5	1477.4	1258.7	1139.9	1074.7	1049.3	1046.2
40°	3165.7	3095.5	2829.5	2374.3	1839.3	1434.4	1214.2	1099.7	1042.0	1020.5	1016.7
42.5°	3276.4	3197.9	2894.5	2400.0	1822.6	1395.8	1177.4	1070.1	1019.1	1000.4	996.9
45°	3378.9	3287.2	2958.7	2422.9	1806.6	1361.1	1150.0	1048.3	1001.1	984.4	982.3
47.5°	3460.8	3368.1	3010.4	2438.6	1784.0	1333.7	1125.4	1029.2	987.2	974.3	973.3
50°	3542.4	3438.9	3054.5	2441.0	1759.0	1306.6	1103.8	1011.8	974.7	966.0	966.0
52.5°	3614.3	3501.4	3085.4	2424.3	1724.0	1276.1	1077.4	992.4	960.1	957.6	958.3
55°	3684.8	3559.4	3093.4	2385.1	1683.4	1245.5	1048.3	966.0	937.5	939.2	940.6
57.5°	3743.4	3585.5	3071.2	2318.1	1634.4	1202.4	1008.7	924.3	891.3	892.4	895.5
60°	3776.8	3581.3	3016.0	2235.1	1564.3	1145.5	950.0	857.6	810.4	801.7	806.3
62.5°	3794.5	3553.9	2922.6	2125.7	1482.0	1070.1	856.3	749.0	691.7	696.5	693.1
65°	3793.4	3504.9	2798.3	1992.7	1370.2	946.5	732.0	619.8	581.3	568.8	567.7
67.5°	3769.1	3412.5	2620.5	1808.4	1219.5	788.2	583.3	494.4	455.2	453.8	449.3
70°	3676.1	3264.3	2380.6	1599.7	1002.8	589.2	445.5	372.6	337.5	294.4	292.7
71°	3611.5	3176.1	2240.6	1493.1	905.2	520.8	392.4	333.3	278.8	227.1	227.1
72.5°	3421.2	3012.2	2047.6	1326.1	737.9	426.0	324.0	267.7	189.9	178.1	178.8
75°	2970.5	2575.4	1675.4	995.8	499.0	292.4	226.0	175.3	130.2	141.7	145.5
77.5°	2233.7	1966.0	1245.2	626.7	284.0	186.5	156.3	115.3	103.5	116.7	116.3
80°	1280.2	1220.8	767.7	335.1	124.0	117.4	110.4	84.0	79.2	88.5	88.5
82.5°	629.9	676.7	419.4	125.0	56.9	68.4	70.8	58.7	55.2	59.7	61.1
85°	206.6	298.3	154.5	44.8	32.6	34.0	31.3	30.2	29.9	30.9	30.6
87.5°	29.9	53.8	22.2	17.4	13.5	11.8	9.7	9.0	7.6	6.6	6.3
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)