

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P136480

Luminaire Tested: **LD6A10D010TE ERW6A10827 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136480
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23360)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A10D010TE ERW6A10827 6LW121LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1143.0 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.14
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

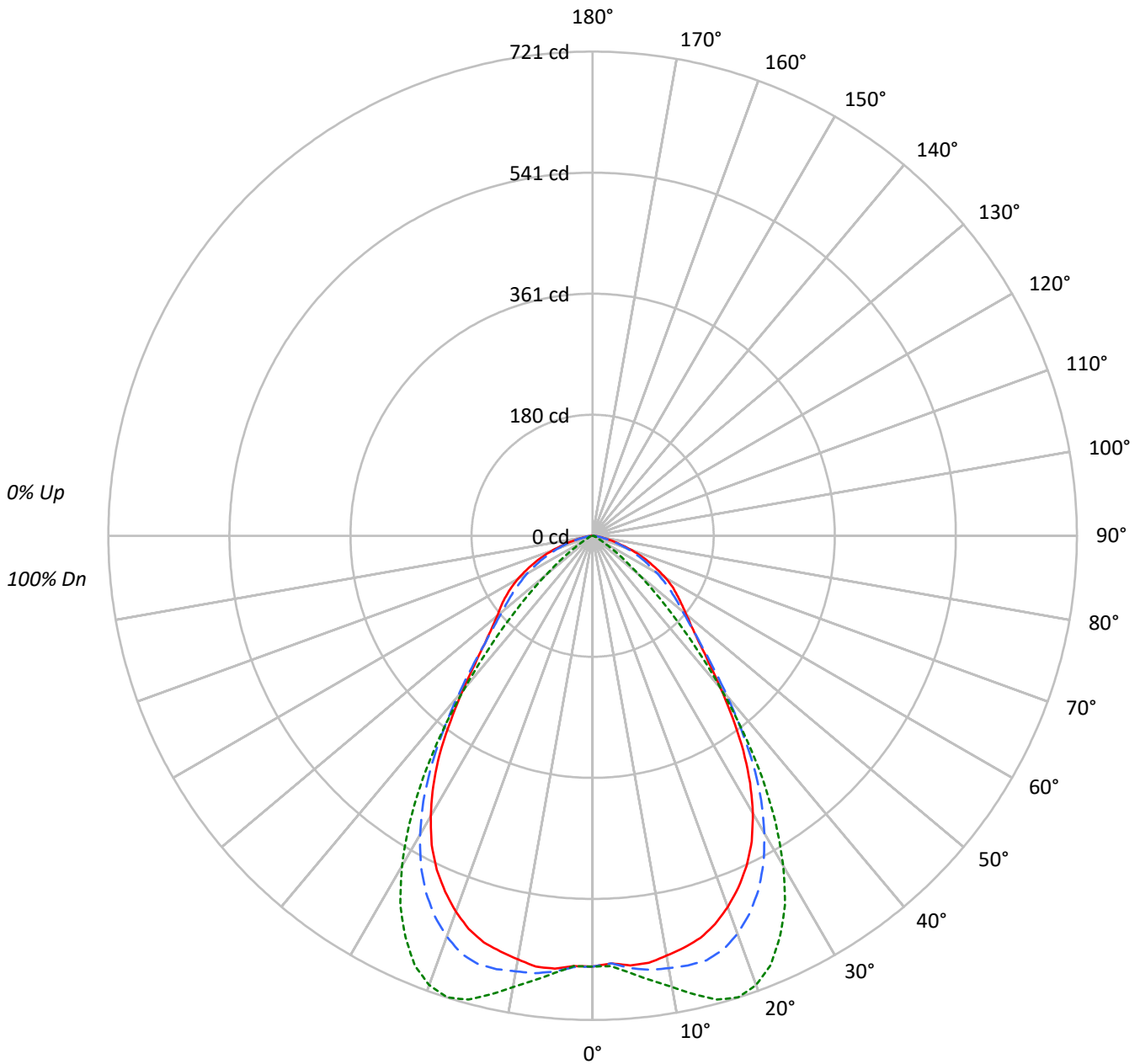
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79								
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70								
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63								
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56								
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51								
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46								
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42								
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39								
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	41845	41845	41845
5°	42058	42811	42378
10°	42060	45200	42438
15°	41883	48293	42329
20°	40837	49419	41351
25°	39045	47467	39520
30°	35934	42774	36303
35°	31149	35051	31603
40°	25226	25226	25575
45°	20603	15999	20981
50°	18432	9135	18767
55°	17403	4652	17960
60°	16336	2022	16754
65°	14264	1142	14773
70°	11540	935	12017
75°	8041	630	8243
80°	4922	301	4922
85°	2470	599	2470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	5.5
10°-20°	187.0	16.4
20°-30°	272.0	23.8
30°-40°	258.5	22.6
40°-50°	167.5	14.7
50°-60°	105.1	9.2
60°-70°	62.8	5.5
70°-80°	24.5	2.1
80°-90°	3.4	0.3
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°-30°	521.3	45.6
0°-40°	779.8	68.2
0°-60°	1052.3	92.1
0°-90°	1143.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1143.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	641	641	641	641	641	
5°	642	646	654	651	647	61
15°	620	654	715	660	627	174
25°	542	583	659	587	549	248
35°	391	417	440	419	397	242
45°	223	227	173	227	227	176
55°	153	141	41	142	158	137
65°	92	81	7	83	96	91
75°	32	28	2	29	33	36
85°	3	3	1	3	3	5
90°	0	0	0	0	0	



TEST NUMBER: P136480

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4
2.5°	637.3	633.2	644.7	638.1	639.0	647.1	640.6	638.1	646.3	637.3	641.4
5°	642.2	639.0	650.4	644.7	645.5	653.7	648.0	645.5	654.5	646.3	650.4
7.5°	641.4	639.0	649.6	644.7	645.5	655.3	649.6	648.8	659.4	652.0	657.8
10°	634.9	631.6	643.0	639.0	640.6	651.2	646.3	646.3	658.6	653.7	661.9
12.5°	628.3	625.0	636.5	633.2	634.9	646.3	643.0	644.7	658.6	655.3	666.0
15°	620.1	616.9	629.1	625.9	627.5	639.8	638.1	639.8	655.3	654.5	666.8
17.5°	606.2	604.6	615.2	613.6	615.2	627.5	626.7	629.1	646.3	646.3	661.9
20°	588.2	585.8	597.2	595.6	596.4	608.7	608.7	611.1	629.1	630.8	646.3
22.5°	567.0	565.3	576.8	574.3	576.0	587.4	587.4	589.9	607.0	609.5	625.9
25°	542.4	540.8	551.4	550.6	551.4	562.9	562.0	565.3	581.7	583.3	598.9
27.5°	513.0	510.5	521.1	521.1	522.0	532.6	532.6	534.2	549.0	550.6	565.3
30°	477.0	474.5	484.3	485.1	485.1	495.8	495.8	496.6	510.5	511.3	524.4
32.5°	436.1	436.1	443.4	444.2	444.2	454.1	454.9	454.9	467.1	467.1	477.8
35°	391.1	391.9	397.6	398.4	399.2	408.2	408.2	407.4	418.1	417.2	426.2
37.5°	342.8	342.8	348.5	349.3	349.3	357.5	357.5	356.7	365.7	363.2	369.8
40°	296.2	296.2	301.1	302.7	301.9	308.4	308.4	307.6	314.2	310.9	314.2
42.5°	255.3	256.9	260.2	261.0	260.2	265.9	265.1	264.3	269.2	264.3	265.1
45°	223.3	225.0	227.4	228.3	227.4	231.5	230.7	229.1	231.5	226.6	224.2
47.5°	199.6	200.4	204.5	203.7	202.9	206.2	206.2	202.9	203.7	197.2	192.3
50°	181.6	182.4	185.7	185.7	184.1	187.3	185.7	182.4	181.6	174.3	166.9
52.5°	166.9	167.7	171.0	171.0	169.4	171.8	170.2	165.3	164.4	157.1	148.1
55°	153.0	153.8	157.1	157.1	155.4	157.1	154.6	150.5	148.9	140.7	130.9
57.5°	140.7	139.9	142.4	142.4	140.7	141.5	139.9	135.8	132.5	125.2	115.4
60°	125.2	124.4	126.0	126.0	124.4	125.2	123.5	118.6	117.0	109.6	99.8
62.5°	108.0	108.0	109.6	109.6	108.0	108.0	107.2	102.3	100.6	94.1	85.9
65°	92.4	92.4	94.1	94.1	92.4	93.3	91.6	88.4	86.7	81.0	73.6
67.5°	76.9	76.9	77.7	77.7	76.9	76.9	76.1	73.6	71.2	67.1	60.5
70°	60.5	60.5	61.4	61.4	60.5	60.5	60.5	58.1	57.3	53.2	48.3
72.5°	45.0	45.0	45.8	45.8	45.8	46.6	45.8	44.2	42.5	40.1	36.0
75°	31.9	31.9	31.9	32.7	31.9	31.9	32.7	31.1	30.3	27.8	25.4
77.5°	21.3	21.3	21.3	21.3	21.3	22.1	21.3	21.3	20.5	18.8	17.2
80°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.3	12.3	10.6
82.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	6.5	5.7
85°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.5
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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°	95°	100°	105°
0°	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4
2.5°	640.6	641.4	641.4	643.9	646.3	639.8	643.0	641.4	639.8	646.3	642.2
5°	651.2	652.0	652.0	655.3	658.6	651.2	654.5	653.7	652.0	657.8	653.7
7.5°	659.4	661.9	663.5	667.6	671.7	665.1	669.2	667.6	666.8	672.5	666.8
10°	665.1	670.0	672.5	679.0	684.8	678.2	683.9	682.3	681.5	686.4	679.9
12.5°	671.7	678.2	684.8	692.1	700.3	694.6	701.9	699.5	699.5	703.6	695.4
15°	675.8	683.9	692.9	703.6	713.4	709.3	717.5	715.0	715.0	718.3	709.3
17.5°	671.7	682.3	692.9	705.2	716.7	714.2	723.2	720.8	719.9	723.2	712.6
20°	657.8	670.0	682.3	694.6	707.7	706.0	715.9	711.8	712.6	714.2	703.6
22.5°	635.7	648.8	661.0	674.1	686.4	685.6	694.6	692.1	691.3	693.8	682.3
25°	609.5	621.0	632.4	643.9	656.1	654.5	663.5	659.4	660.2	661.0	651.2
27.5°	574.3	585.0	594.0	603.8	615.2	612.8	621.8	620.1	617.7	618.5	610.3
30°	531.0	540.0	546.5	554.7	563.7	561.2	569.4	567.8	566.1	566.1	561.2
32.5°	481.9	488.4	492.5	498.2	504.8	502.3	508.9	507.2	505.6	505.6	502.3
35°	427.1	431.1	431.1	434.4	439.3	435.2	441.0	440.1	437.7	438.5	437.7
37.5°	367.3	369.0	365.7	365.7	369.0	363.2	368.2	368.2	365.7	366.5	366.5
40°	309.2	308.4	301.9	298.6	298.6	292.9	297.0	296.2	294.5	295.3	297.0
42.5°	257.7	252.8	243.8	237.3	235.6	229.1	231.5	230.7	229.1	230.7	233.2
45°	214.3	205.3	193.1	184.1	180.0	173.4	174.3	173.4	172.6	174.3	178.4
47.5°	180.0	167.7	152.2	140.7	135.0	127.6	127.6	126.8	126.8	130.9	133.4
50°	153.0	138.3	120.3	107.2	99.0	92.4	90.8	90.0	90.8	94.1	99.0
52.5°	132.5	114.5	94.9	81.0	72.0	64.6	63.0	62.2	63.0	66.3	71.2
55°	114.5	95.7	75.3	59.7	49.9	43.4	40.9	40.9	40.9	45.0	49.9
57.5°	98.2	79.4	58.9	43.4	34.4	27.8	25.4	24.5	26.2	28.6	33.5
60°	84.3	66.3	46.6	32.7	23.7	18.0	15.5	15.5	15.5	18.8	23.7
62.5°	72.0	55.6	37.6	24.5	17.2	12.3	9.8	9.8	10.6	12.3	17.2
65°	61.4	47.5	31.9	21.3	13.9	9.8	8.2	7.4	8.2	9.8	13.9
67.5°	50.7	39.3	27.0	18.0	12.3	8.2	7.4	6.5	6.5	9.0	11.5
70°	40.1	31.1	22.1	14.7	9.8	6.5	5.7	4.9	5.7	7.4	9.8
72.5°	30.3	23.7	16.4	11.5	7.4	5.7	4.1	4.1	4.1	5.7	7.4
75°	21.3	17.2	12.3	8.2	4.9	3.3	3.3	2.5	3.3	4.1	4.9
77.5°	13.9	11.5	8.2	4.9	3.3	2.5	1.6	1.6	1.6	2.5	3.3
80°	9.0	7.4	4.9	3.3	2.5	1.6	0.8	0.8	0.8	1.6	1.6
82.5°	4.9	4.1	2.5	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8
85°	2.5	1.6	1.6	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
87.5°	0.8	0.0	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4	641.4
2.5°	643.0	640.6	643.9	646.3	645.5	643.0	647.1	640.6	643.0	640.6	636.5
5°	654.5	652.0	654.5	656.1	655.3	651.2	654.5	648.8	650.4	647.1	643.0
7.5°	666.8	663.5	664.3	665.1	662.7	657.0	659.4	652.0	652.9	648.8	643.9
10°	678.2	673.3	672.5	670.9	666.0	658.6	659.4	650.4	649.6	643.9	638.1
12.5°	692.9	684.8	681.5	678.2	670.9	661.0	659.4	648.8	647.1	640.6	634.0
15°	703.6	694.6	688.9	682.3	672.5	660.2	657.0	644.7	641.4	634.0	627.5
17.5°	706.0	694.6	686.4	678.2	666.8	652.0	647.1	634.0	630.0	621.8	615.2
20°	695.4	683.1	674.1	663.5	652.0	634.9	630.0	616.0	611.1	603.8	597.2
22.5°	674.9	661.0	652.0	641.4	630.0	613.6	607.9	594.8	589.9	582.5	576.0
25°	645.5	632.4	623.4	613.6	603.0	586.6	581.7	569.4	565.3	558.0	551.4
27.5°	604.6	592.3	587.4	577.6	567.8	553.9	549.0	538.3	534.2	529.3	522.0
30°	555.5	544.9	542.4	533.4	526.1	513.8	509.7	500.7	496.6	492.5	486.0
32.5°	499.1	490.9	490.9	483.5	478.6	468.8	465.5	458.1	454.9	451.6	445.9
35°	435.2	429.5	432.8	427.9	425.4	418.9	416.4	410.7	408.2	405.8	400.1
37.5°	367.3	363.2	369.8	370.6	370.6	364.9	363.2	360.0	358.3	355.9	351.0
40°	300.3	299.4	309.2	310.9	315.8	312.5	313.3	310.9	309.2	307.6	304.3
42.5°	238.1	241.3	253.6	261.0	265.9	265.9	268.3	267.5	266.7	265.1	262.6
45°	184.9	191.4	206.2	215.2	225.0	227.4	231.5	231.5	232.3	231.5	229.1
47.5°	141.5	151.4	168.5	182.4	193.1	198.0	203.7	205.3	206.2	206.2	204.5
50°	107.2	119.4	139.1	154.6	169.4	175.9	182.4	184.9	188.2	187.3	185.7
52.5°	81.0	94.9	116.2	135.0	150.5	157.9	165.3	168.5	171.8	171.8	171.0
55°	59.7	74.4	97.4	117.0	133.4	142.4	149.7	153.0	157.1	157.9	157.1
57.5°	43.4	58.1	80.2	101.4	117.0	126.8	134.2	137.4	141.5	142.4	142.4
60°	31.9	46.6	67.9	87.5	102.3	112.1	117.8	121.9	125.2	126.8	126.8
62.5°	24.5	37.6	57.3	75.3	88.4	96.5	102.3	105.5	108.8	109.6	110.4
65°	20.5	31.9	48.3	63.8	75.3	82.6	87.5	90.8	93.3	94.1	94.1
67.5°	17.2	27.0	40.1	52.4	62.2	67.9	72.0	74.4	76.9	77.7	77.7
70°	13.9	21.3	31.9	41.7	49.1	54.0	57.3	59.7	61.4	61.4	61.4
72.5°	10.6	16.4	23.7	31.1	36.8	40.9	43.4	44.2	45.8	45.8	45.8
75°	7.4	11.5	17.2	22.1	25.4	28.6	30.3	31.1	31.9	32.7	31.9
77.5°	4.9	7.4	10.6	13.9	17.2	18.8	19.6	20.5	21.3	21.3	21.3
80°	3.3	4.9	6.5	9.0	10.6	11.5	12.3	12.3	13.1	13.1	13.1
82.5°	1.6	2.5	4.1	4.9	5.7	6.5	6.5	6.5	7.4	7.4	6.5
85°	0.8	0.8	1.6	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
87.5°	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P136480

CATALOG NUMBER: LD6A10D010TE ERW6A10827 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	641.4	641.4	641.4	641.4
2.5°	638.1	639.8	633.2	641.4
5°	643.9	645.5	639.0	647.1
7.5°	644.7	645.5	639.0	647.1
10°	639.0	639.0	632.4	640.6
12.5°	634.0	633.2	625.9	634.0
15°	626.7	625.9	618.5	626.7
17.5°	614.4	613.6	606.2	613.6
20°	595.6	594.8	588.2	595.6
22.5°	575.1	573.5	567.0	573.5
25°	551.4	549.8	543.2	549.0
27.5°	521.1	519.5	513.0	518.7
30°	485.1	482.7	477.8	481.9
32.5°	444.2	442.6	436.9	441.8
35°	399.2	396.8	392.7	396.8
37.5°	350.2	348.5	344.4	346.9
40°	302.7	301.9	298.6	300.3
42.5°	261.8	260.2	257.7	259.3
45°	229.1	228.3	225.8	227.4
47.5°	204.5	203.7	201.3	202.9
50°	186.5	185.7	184.1	184.9
52.5°	171.8	171.0	169.4	171.8
55°	158.7	157.9	155.4	157.9
57.5°	144.0	143.2	140.7	144.0
60°	127.6	127.6	125.2	128.4
62.5°	111.3	111.3	109.6	112.1
65°	95.7	94.9	94.1	95.7
67.5°	78.5	77.7	77.7	79.4
70°	62.2	61.4	61.4	63.0
72.5°	46.6	45.8	45.8	46.6
75°	32.7	31.9	31.9	32.7
77.5°	21.3	21.3	21.3	21.3
80°	13.1	13.1	13.1	13.1
82.5°	7.4	7.4	6.5	7.4
85°	3.3	3.3	3.3	3.3
87.5°	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)