

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: P252656

Luminaire Tested: **LD6B10D010 EU6B10209035 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B10D010 EU6B10209035 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 860.0 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

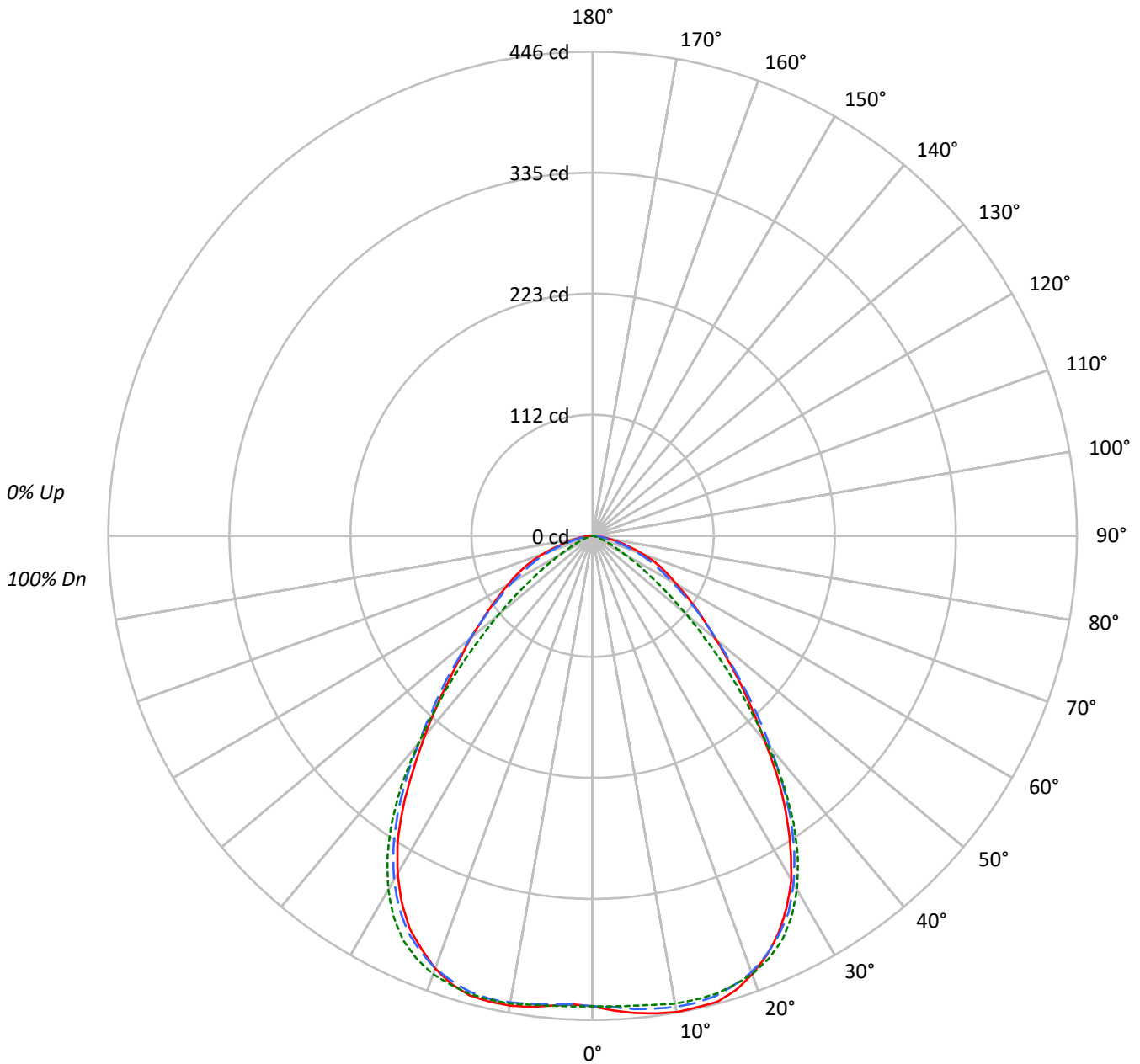
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	28269	28269	28269
5°	28901	28455	28455
10°	29513	28990	29109
15°	30009	29516	29597
20°	29826	29826	29444
25°	29118	29643	28722
30°	27564	28348	27052
35°	24698	25677	24212
40°	20985	21240	20457
45°	17752	16229	17133
50°	14991	11449	14808
55°	13172	7393	13035
60°	11678	4397	11756
65°	10791	2655	10791
70°	9347	1526	9118
75°	7411	933	6957
80°	5523	676	5297
85°	5015	449	4566



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	4.9
10°-20°	123.5	14.4
20°-30°	185.7	21.6
30°-40°	195.2	22.7
40°-50°	145.8	17.0
50°-60°	90.8	10.6
60°-70°	51.6	6.0
70°-80°	21.3	2.5
80°-90°	4.4	0.5
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°	350.9	40.8
0°-40°	546.1	63.5
0°-60°	782.7	91.0
0°-90°	860.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	860.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	433	433	433	433	433	
5°	441	438	434	433	434	42
15°	444	439	437	435	438	125
25°	404	406	412	403	399	185
35°	310	318	322	313	304	192
45°	192	197	176	193	186	149
55°	116	113	65	112	115	104
65°	70	62	17	62	70	69
75°	29	23	4	23	28	32
85°	7	4	1	4	6	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3
2.5°	437.6	437.0	437.6	436.4	435.7	435.7	436.4	435.1	434.5	435.1	434.5
5°	441.3	440.0	440.6	440.0	438.8	438.8	439.4	437.6	437.6	438.2	437.6
7.5°	443.7	443.7	443.7	442.5	441.9	441.3	442.5	440.6	440.0	440.0	439.4
10°	445.5	444.9	445.5	444.3	443.1	442.5	443.7	442.5	441.3	442.5	440.6
12.5°	444.9	444.9	444.9	444.3	443.1	442.5	443.7	441.9	441.3	441.9	440.6
15°	444.3	442.5	443.1	442.5	440.6	440.6	441.3	439.4	438.2	440.0	438.8
17.5°	438.8	437.6	438.2	437.0	435.7	435.1	435.7	435.1	433.9	435.1	433.9
20°	429.6	429.6	430.2	429.0	427.8	427.2	428.4	427.2	425.9	427.8	427.8
22.5°	418.6	418.6	418.6	418.0	417.4	417.4	417.4	416.7	416.1	417.4	418.0
25°	404.5	403.9	404.5	405.1	404.5	403.9	404.5	404.5	403.3	405.7	405.7
27.5°	386.7	386.7	387.9	387.3	387.3	386.7	387.9	387.9	387.3	389.2	391.0
30°	365.9	364.6	365.9	365.9	366.5	366.5	367.1	367.1	367.1	368.9	370.2
32.5°	338.9	339.5	341.4	340.7	340.1	342.0	342.0	343.2	343.8	345.0	345.6
35°	310.1	310.7	310.7	311.3	312.6	311.3	314.4	313.8	314.4	316.8	318.1
37.5°	279.5	277.6	280.7	279.5	280.1	280.1	281.3	281.9	283.8	286.8	286.8
40°	246.4	247.0	248.2	248.8	249.4	249.4	249.4	251.3	251.9	255.6	254.9
42.5°	217.6	217.6	218.8	219.4	219.4	219.4	219.4	221.2	222.5	223.7	224.9
45°	192.4	190.6	191.8	191.8	193.0	192.4	193.7	194.9	195.5	197.3	196.7
47.5°	168.5	167.9	168.5	169.1	168.5	169.1	169.8	170.4	171.0	171.0	171.0
50°	147.7	147.7	148.3	148.9	148.9	148.9	148.9	149.5	149.5	150.8	149.5
52.5°	130.5	131.2	131.2	130.5	131.2	131.2	131.8	131.8	131.2	131.2	129.3
55°	115.8	115.2	115.8	115.2	115.8	115.8	115.2	115.2	114.6	114.0	113.4
57.5°	101.7	101.7	101.7	101.7	101.1	101.7	101.1	100.5	100.5	99.3	97.4
60°	89.5	89.5	89.5	89.5	89.5	88.9	89.5	88.9	87.6	86.4	84.0
62.5°	79.1	78.4	79.1	78.4	78.4	77.8	77.8	77.2	76.0	74.8	72.3
65°	69.9	70.5	69.9	69.9	69.3	68.6	68.6	68.0	66.2	65.0	62.5
67.5°	60.1	59.4	59.4	59.4	58.8	58.8	58.8	57.6	56.4	54.5	52.1
70°	49.0	49.0	49.0	48.4	48.4	47.8	47.8	47.2	46.0	44.7	41.7
72.5°	38.6	38.6	38.6	37.4	38.0	37.4	37.4	36.2	35.5	33.7	31.9
75°	29.4	29.4	28.8	28.8	28.2	27.6	27.6	27.0	26.4	25.1	23.3
77.5°	21.4	21.4	21.4	20.8	20.2	19.6	19.6	19.0	18.4	17.8	16.5
80°	14.7	14.7	14.7	14.7	14.1	13.5	13.5	12.9	12.9	12.3	11.0
82.5°	9.8	9.8	9.8	9.8	9.2	9.2	9.2	8.6	8.0	8.0	6.7
85°	6.7	6.7	6.1	6.1	6.1	6.1	5.5	5.5	4.9	4.3	4.3
87.5°	3.7	3.7	3.7	3.7	3.1	3.1	3.1	3.1	2.5	2.5	1.8
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3
2.5°	436.4	436.4	435.7	433.9	434.5	433.9	434.5	433.9	432.1	433.9	432.1
5°	438.8	439.4	438.2	435.7	436.4	435.7	435.7	435.1	433.3	434.5	433.3
7.5°	441.3	440.6	440.0	437.6	438.2	437.6	437.6	436.4	434.5	435.7	433.9
10°	442.5	442.5	441.3	438.8	438.8	438.2	438.8	438.2	435.7	437.6	436.4
12.5°	442.5	441.9	441.9	438.8	439.4	438.8	439.4	438.2	436.4	437.6	437.0
15°	440.6	440.6	440.0	437.0	437.6	437.6	438.2	437.0	435.1	437.0	435.7
17.5°	437.0	437.0	436.4	433.9	435.1	435.1	435.7	434.5	432.7	433.9	433.9
20°	429.6	430.2	430.2	428.4	429.6	429.6	430.2	429.6	429.0	429.6	428.4
22.5°	421.0	422.3	422.3	420.4	421.6	421.6	423.5	422.9	421.6	422.3	421.6
25°	408.2	409.4	410.6	409.4	410.6	410.6	412.4	411.8	410.6	411.8	410.0
27.5°	393.5	394.1	395.3	394.1	395.9	395.3	397.1	396.5	394.7	396.5	395.9
30°	372.6	375.1	376.9	375.1	376.9	376.9	378.1	377.5	376.9	376.3	376.3
32.5°	349.3	351.8	351.8	351.2	352.4	352.4	353.0	351.8	351.2	351.8	352.4
35°	320.5	321.7	323.0	322.4	323.0	323.6	323.0	323.6	321.7	322.4	322.4
37.5°	289.3	290.5	290.5	288.7	289.9	289.9	288.7	288.7	287.4	288.7	286.2
40°	256.2	254.9	255.6	254.3	253.1	253.1	252.5	250.0	248.8	249.4	250.0
42.5°	223.7	223.7	221.9	218.8	215.7	215.7	213.9	212.7	210.2	211.4	210.8
45°	196.1	193.0	190.6	185.7	183.9	182.6	179.6	176.5	175.3	175.9	175.3
47.5°	169.8	167.3	161.2	154.4	152.6	150.8	147.1	143.4	142.2	141.0	141.0
50°	147.7	143.4	136.7	129.3	126.2	123.2	118.3	114.6	112.2	112.8	112.8
52.5°	127.5	122.6	114.6	105.4	101.7	98.1	93.8	89.5	87.6	87.0	87.0
55°	109.7	104.2	96.2	85.8	82.7	78.4	72.9	68.0	65.6	65.0	66.2
57.5°	93.8	88.9	79.7	69.3	65.6	61.3	55.8	51.5	48.4	47.8	48.4
60°	80.9	74.2	66.2	56.4	51.5	47.8	41.7	38.0	34.9	33.7	34.3
62.5°	68.0	61.9	53.9	44.1	40.4	36.8	31.3	27.0	24.5	23.9	24.5
65°	58.2	52.1	44.7	36.2	32.5	28.8	23.9	19.6	17.8	17.2	17.8
67.5°	48.4	42.9	36.8	28.8	25.7	22.7	17.8	14.7	12.3	11.6	12.3
70°	39.2	34.3	28.2	22.7	19.6	17.2	13.5	10.4	8.6	8.0	8.6
72.5°	29.4	25.7	21.4	16.5	14.7	12.9	9.8	7.4	6.1	5.5	6.1
75°	21.4	18.4	15.3	11.6	10.4	9.2	6.7	4.9	4.3	3.7	4.3
77.5°	14.7	12.9	10.4	8.0	6.7	6.1	4.3	3.7	3.1	2.5	2.5
80°	9.8	8.6	6.7	5.5	4.9	4.3	3.1	2.5	1.8	1.8	1.8
82.5°	6.1	4.9	4.3	3.1	2.5	2.5	1.8	1.2	1.2	1.2	1.2
85°	3.7	3.1	2.5	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6
87.5°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.6
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3
2.5°	433.3	432.1	432.1	432.7	433.3	433.9	432.7	432.1	432.1	433.9	432.7
5°	433.3	432.7	432.7	432.7	433.9	434.5	433.3	432.7	433.3	435.1	434.5
7.5°	435.1	433.9	434.5	434.5	435.1	436.4	435.1	434.5	435.1	437.0	435.7
10°	436.4	435.1	435.7	435.1	437.0	437.6	436.4	435.7	436.4	438.8	438.2
12.5°	437.0	436.4	436.4	435.7	437.6	438.2	437.0	436.4	437.0	438.8	438.2
15°	435.7	435.1	435.1	435.1	436.4	437.6	435.7	435.1	435.1	437.0	436.4
17.5°	433.3	432.1	432.1	432.1	432.7	433.3	431.4	430.8	430.2	432.1	431.4
20°	429.0	427.8	426.5	426.5	427.2	427.2	425.9	424.1	424.1	424.7	423.5
22.5°	421.0	420.4	419.2	418.6	419.8	419.2	416.7	414.9	414.3	414.9	413.7
25°	410.0	408.8	408.2	407.5	408.2	407.5	405.1	402.6	402.6	402.6	400.8
27.5°	394.7	393.5	392.8	392.8	393.5	392.2	389.8	387.3	386.1	386.1	384.3
30°	375.1	375.1	374.5	373.8	373.2	373.2	369.5	367.1	365.9	366.5	365.3
32.5°	351.2	350.6	349.9	348.1	348.7	348.1	345.0	343.2	341.4	340.1	339.5
35°	320.5	320.5	319.9	319.9	319.9	319.3	316.2	314.4	313.2	312.6	310.7
37.5°	286.8	286.2	285.6	285.6	285.6	285.6	283.8	281.9	281.9	281.3	280.1
40°	248.8	249.4	250.0	249.4	251.3	253.1	250.7	249.4	248.8	250.7	248.2
42.5°	212.0	211.4	214.5	215.1	215.1	218.2	218.8	219.4	218.8	220.0	220.0
45°	176.5	175.9	179.0	180.2	183.2	186.9	188.8	191.8	193.0	194.3	193.0
47.5°	142.8	145.2	147.7	150.8	153.2	159.3	163.0	166.1	167.3	169.1	169.1
50°	114.6	117.1	121.3	123.8	126.9	134.2	140.3	144.6	147.1	148.9	148.3
52.5°	88.3	92.5	98.1	100.5	104.8	113.4	120.1	125.0	128.1	129.9	130.5
55°	68.0	71.7	77.2	80.9	85.2	94.4	103.0	108.5	111.5	114.0	115.2
57.5°	50.3	54.5	60.7	63.7	68.6	79.1	86.4	93.2	96.8	99.9	100.5
60°	36.8	41.1	46.6	50.3	55.2	65.6	74.2	80.3	84.6	87.0	88.3
62.5°	26.4	30.6	36.2	39.8	44.1	53.3	61.9	68.0	72.3	75.4	77.2
65°	19.0	23.3	28.8	31.9	35.5	44.1	52.1	58.2	62.5	66.2	67.4
67.5°	14.1	17.2	22.1	25.1	28.8	35.5	42.3	47.8	52.1	55.2	56.4
70°	10.4	12.9	17.2	19.0	21.4	27.6	33.1	38.0	41.7	44.1	45.4
72.5°	7.4	9.2	12.3	14.1	15.9	20.8	25.1	28.8	31.3	33.7	34.9
75°	4.9	6.1	8.6	9.8	11.0	14.7	17.8	20.8	22.7	24.5	25.1
77.5°	3.1	4.3	6.1	6.7	8.0	9.8	12.3	14.1	15.3	16.5	17.8
80°	1.8	2.5	3.7	4.3	4.9	6.7	8.0	9.2	10.4	11.6	12.3
82.5°	1.2	1.8	2.5	2.5	3.1	3.7	4.9	6.1	6.7	7.4	8.0
85°	0.6	0.6	1.2	1.2	1.8	1.8	2.5	3.1	3.7	4.3	4.9
87.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.8	1.8	1.8	2.5	2.5
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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3
2.5°	431.4	433.3	431.4	432.7	432.1	432.1	431.4	432.1
5°	433.3	435.7	433.3	435.1	433.9	433.9	433.9	434.5
7.5°	435.1	437.6	435.7	437.6	437.0	436.4	436.4	437.6
10°	437.0	438.8	437.6	439.4	438.8	438.2	438.2	439.4
12.5°	437.0	439.4	438.2	440.0	439.4	438.8	438.8	439.4
15°	435.1	438.2	436.4	438.2	437.6	437.0	437.0	438.2
17.5°	429.6	432.1	430.8	432.1	432.1	431.4	432.1	432.7
20°	422.3	424.1	422.9	424.1	424.1	422.9	423.5	424.1
22.5°	411.8	413.7	412.4	413.7	413.1	412.4	412.4	411.8
25°	399.0	401.4	399.6	400.8	399.6	398.4	398.4	399.0
27.5°	383.0	384.9	382.4	383.6	382.4	381.2	381.2	380.6
30°	362.2	362.8	361.0	362.2	361.0	360.4	359.1	359.1
32.5°	337.1	337.7	335.8	335.8	334.6	334.6	332.2	334.0
35°	307.7	308.3	307.7	307.0	305.2	304.6	304.0	304.0
37.5°	277.0	277.0	275.2	274.6	273.3	272.1	272.7	270.9
40°	245.8	245.1	243.3	243.9	243.3	241.5	240.9	240.2
42.5°	216.3	216.3	214.5	215.1	213.9	213.3	211.4	212.0
45°	190.6	190.6	188.8	188.8	188.1	186.3	186.9	185.7
47.5°	167.3	167.3	166.7	166.7	164.9	164.2	164.2	164.2
50°	147.1	147.1	147.1	147.1	146.5	145.9	145.2	145.9
52.5°	129.9	131.2	130.5	130.5	129.9	129.3	128.7	128.7
55°	114.6	115.2	115.2	115.8	115.2	114.6	115.2	114.6
57.5°	101.1	102.3	102.3	102.3	102.3	102.3	101.7	101.1
60°	89.5	90.1	90.1	90.7	90.7	90.7	90.1	90.1
62.5°	77.8	79.1	79.7	79.7	80.3	79.7	79.7	79.7
65°	68.6	69.9	70.5	69.9	70.5	70.5	69.9	69.9
67.5°	57.6	58.8	58.8	58.8	58.8	59.4	58.8	58.8
70°	46.6	47.8	47.2	47.8	47.8	47.8	47.8	47.8
72.5°	35.5	36.2	36.8	36.8	37.4	36.8	36.8	36.8
75°	25.7	27.0	27.0	27.0	27.0	27.6	27.6	27.6
77.5°	18.4	19.0	19.0	19.6	19.6	19.6	19.6	20.2
80°	12.9	12.9	13.5	13.5	14.1	14.1	14.1	14.1
82.5°	8.6	9.2	9.2	9.2	9.2	9.2	9.2	9.2
85°	4.9	5.5	5.5	5.5	5.5	6.1	6.1	6.1
87.5°	3.1	3.1	3.1	3.1	3.1	3.1	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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













(END OF REPORT)