

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: PORTFOLIO

Report Number: P879340

Luminaire Tested: **LD4C08D010 EU4089030 4LBDWWH**

Issue Date: 10/1/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P879340
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C08D010 EU4089030 4LBDWWH
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND 4LBDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

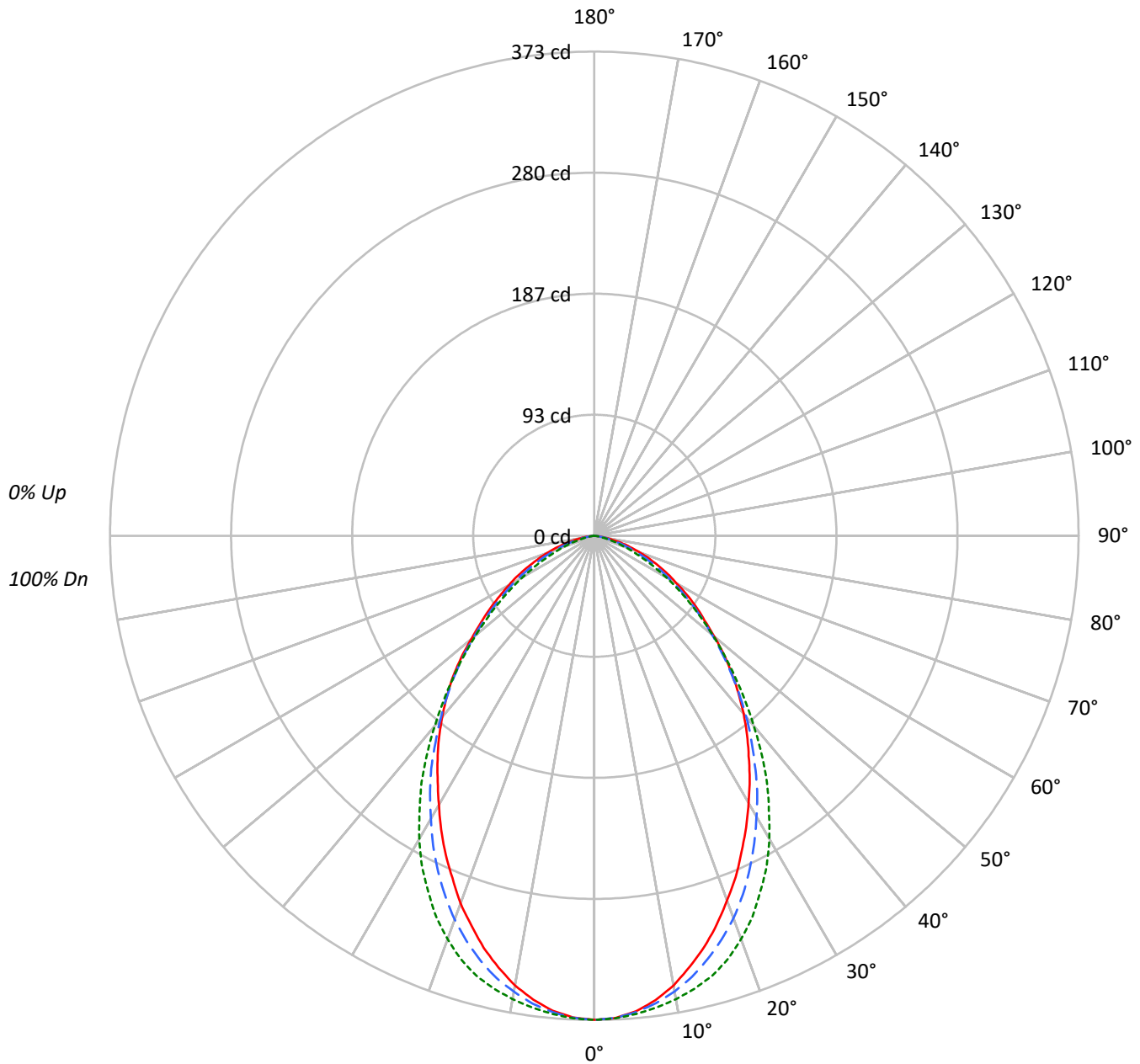
Lumens per Lamp: N/A
Luminaire Lumens: 667.0 lumens
Efficiency: N/A
Efficacy: 67.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.87
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					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77		
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67		
4	88	77	70	64	86	76	69	63	74	68	63	71	66	62	69	65	61	59		
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52		
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38		
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35		
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	45812	45812	45812
5°	45346	45605	45296
10°	43874	45209	43887
15°	41679	44630	41819
20°	39064	43222	39391
25°	36383	41005	36722
30°	33706	38245	33961
35°	31090	34780	31570
40°	28691	30631	29204
45°	25974	26548	26773
50°	23031	22744	23604
55°	20541	19148	21012
60°	17961	15553	18649
65°	15727	12035	16279
70°	13219	8800	13937
75°	10348	5743	10917
80°	6792	2971	7429
85°	2255	1410	3101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.8	5.2
10°-20°	95.1	14.3
20°-30°	130.8	19.6
30°-40°	136.5	20.5
40°-50°	116.8	17.5
50°-60°	83.5	12.5
60°-70°	48.5	7.3
70°-80°	18.7	2.8
80°-90°	2.4	0.4
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°	260.7	39.1
0°-40°	397.2	59.6
0°-60°	597.5	89.6
0°-90°	667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	667.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	373	373	373	373	373	
5°	368	368	370	368	367	35
15°	328	338	351	339	329	92
25°	268	283	302	285	271	123
35°	207	216	232	219	210	130
45°	150	148	153	152	154	115
55°	96	91	89	94	98	86
65°	54	48	41	49	56	54
75°	22	16	12	17	23	23
85°	2	1	1	1	2	3
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°	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9
2.5°	371.9	371.7	371.8	371.8	371.8	371.7	371.9	371.9	371.8	371.8	371.8
5°	367.7	367.4	367.6	367.7	367.7	367.7	367.8	368.0	368.1	368.3	368.4
7.5°	360.9	360.4	360.9	361.4	361.4	361.5	361.7	361.8	362.2	362.9	363.3
10°	351.7	351.7	351.8	352.2	352.9	352.8	353.2	353.9	354.7	355.7	356.3
12.5°	340.0	340.3	340.7	341.1	341.8	342.2	342.9	343.7	345.1	346.5	348.0
15°	327.7	327.9	328.0	328.9	329.6	330.6	331.1	332.8	334.0	335.9	337.6
17.5°	313.9	313.7	314.2	315.0	316.6	317.0	317.7	319.5	321.3	323.9	326.1
20°	298.8	299.6	300.2	301.3	302.2	303.3	303.9	306.1	308.1	310.6	313.5
22.5°	284.6	283.9	284.9	286.1	286.9	287.7	288.7	291.0	293.2	296.2	299.1
25°	268.4	268.8	269.5	270.5	271.6	272.7	273.8	276.2	277.5	280.6	283.2
27.5°	253.1	253.8	254.0	255.3	256.2	257.1	257.6	260.5	261.6	264.3	266.9
30°	237.6	238.3	238.3	239.7	240.3	241.2	242.5	244.5	246.1	248.0	249.9
32.5°	222.7	222.7	223.2	224.5	225.1	226.1	226.5	227.9	229.5	231.4	233.5
35°	207.3	207.7	208.3	208.3	209.5	210.1	210.6	212.0	213.1	213.9	215.6
37.5°	193.2	193.2	192.8	193.5	194.3	194.2	195.0	195.7	196.4	197.3	198.7
40°	178.9	178.9	178.3	178.7	179.3	179.1	178.9	179.5	180.1	180.8	182.1
42.5°	164.2	163.9	163.8	163.8	164.1	163.8	164.1	164.2	164.2	164.2	165.0
45°	149.5	150.2	149.4	149.1	148.7	148.3	148.2	148.3	148.9	148.2	148.3
47.5°	135.2	135.4	134.9	134.5	134.1	133.8	134.1	133.2	133.5	133.7	133.1
50°	120.5	120.0	120.0	119.6	119.7	119.6	119.3	119.0	119.0	118.3	117.9
52.5°	107.0	107.2	107.5	106.5	106.7	106.0	106.1	105.4	105.4	104.6	104.9
55°	95.9	95.5	95.5	95.0	94.9	94.2	94.1	93.7	92.7	92.2	91.1
57.5°	84.4	84.2	83.7	83.8	83.0	82.9	82.6	81.9	81.2	80.5	79.3
60°	73.1	73.3	73.3	73.0	72.6	71.9	72.0	71.1	70.1	68.9	67.8
62.5°	63.8	63.4	63.3	63.0	62.2	62.2	61.5	60.8	59.8	58.6	57.7
65°	54.1	54.2	53.8	53.4	52.6	52.5	51.9	51.4	50.4	49.2	47.8
67.5°	45.3	45.1	44.9	44.5	43.7	43.5	43.1	41.9	41.1	39.9	38.8
70°	36.8	36.6	36.7	36.0	35.2	34.8	34.6	33.7	32.5	31.5	30.4
72.5°	28.9	28.9	28.8	28.1	27.7	27.4	26.8	25.7	25.1	24.0	23.1
75°	21.8	21.6	21.4	21.0	20.4	20.1	19.9	19.2	18.2	17.0	16.3
77.5°	15.1	15.2	14.9	14.8	14.1	13.7	13.6	13.1	12.3	11.5	10.8
80°	9.6	9.4	9.3	9.0	8.9	8.8	8.4	8.1	7.3	6.8	6.4
82.5°	5.2	4.9	4.9	4.8	4.5	4.4	4.2	4.0	3.8	3.6	3.3
85°	1.6	1.8	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.2
87.5°	0.1	0.3	0.1	0.1	0.3	0.1	0.1	0.3	0.1	0.1	0.3
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°	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9
2.5°	371.8	371.9	371.9	372.1	372.1	372.1	372.1	372.1	372.1	372.1	372.1
5°	368.8	368.8	369.1	369.3	369.3	369.3	369.5	369.8	369.8	369.8	369.6
7.5°	363.9	364.4	365.0	365.5	365.6	365.8	366.1	366.6	366.6	366.6	366.6
10°	357.4	358.7	359.4	360.2	360.6	360.9	361.7	361.8	362.2	362.4	362.2
12.5°	349.2	350.9	352.4	353.7	354.3	354.8	355.7	356.5	356.9	357.3	357.2
15°	340.0	341.8	344.1	345.7	346.8	347.6	348.8	349.9	350.6	350.9	350.9
17.5°	328.9	331.1	333.6	336.1	336.8	338.1	339.5	341.0	341.8	342.0	341.8
20°	316.6	319.1	321.1	323.6	325.1	325.8	327.7	329.6	330.5	330.6	330.5
22.5°	302.0	304.3	307.0	309.6	310.9	312.1	314.2	316.1	317.2	318.0	317.2
25°	285.7	289.0	291.6	293.8	295.5	296.8	299.4	300.9	302.7	302.5	302.7
27.5°	269.6	272.4	275.3	277.9	279.0	280.3	282.4	284.9	286.4	287.3	287.2
30°	253.2	255.4	257.9	260.2	262.0	263.1	266.1	267.2	269.1	269.6	269.2
32.5°	235.8	237.3	239.8	242.9	243.6	244.7	246.6	249.4	250.1	250.3	250.5
35°	217.3	220.2	222.3	224.2	224.7	225.7	227.9	229.9	230.6	231.9	231.3
37.5°	200.2	201.9	202.8	204.7	206.4	207.2	208.3	209.7	211.0	211.6	211.4
40°	183.1	183.9	184.7	186.8	186.9	186.9	188.6	190.5	190.5	191.0	191.0
42.5°	165.6	165.7	166.8	167.9	168.2	168.4	170.1	170.4	171.2	171.6	172.1
45°	148.6	149.4	150.1	150.2	150.9	151.1	151.5	151.9	153.1	152.8	153.1
47.5°	133.1	133.5	133.9	133.9	134.3	134.2	134.9	134.5	135.3	135.6	136.0
50°	117.9	118.6	118.2	118.5	118.3	118.7	118.5	118.5	118.5	119.0	119.4
52.5°	103.9	104.1	103.7	103.8	103.8	103.5	103.8	103.7	103.5	103.5	103.7
55°	91.1	90.5	90.2	89.7	89.0	89.8	89.4	89.2	89.7	89.4	89.7
57.5°	78.6	77.9	77.4	77.1	76.1	76.7	76.1	75.9	75.9	75.9	76.6
60°	66.8	66.1	65.5	64.6	64.5	64.2	64.0	63.3	63.4	63.3	63.5
62.5°	56.6	55.2	54.2	53.5	53.4	53.0	52.6	51.9	52.0	52.0	52.2
65°	47.1	45.6	44.2	43.3	43.3	42.6	41.9	41.9	41.1	41.4	41.5
67.5°	37.7	36.4	35.1	34.4	34.0	33.4	33.0	32.7	32.3	32.3	32.6
70°	29.2	27.9	27.3	26.2	26.0	25.6	25.1	24.7	24.5	24.5	24.4
72.5°	22.0	21.0	20.1	19.4	19.0	18.6	18.1	17.9	17.7	17.7	17.9
75°	15.3	14.7	14.0	13.3	13.0	12.9	12.5	12.2	12.2	12.1	12.2
77.5°	10.3	9.6	8.9	8.6	8.4	8.1	7.9	7.8	7.4	7.4	7.4
80°	5.9	5.6	5.3	4.9	4.9	4.8	4.5	4.4	4.2	4.2	4.2
82.5°	3.0	2.9	2.6	2.5	2.5	2.5	2.3	2.3	2.2	2.2	2.2
85°	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.1
87.5°	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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°	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9
2.5°	372.1	371.9	371.9	371.9	371.9	371.9	371.8	371.8	371.7	371.7	371.7
5°	369.8	369.6	369.5	369.3	369.2	369.1	368.9	368.8	368.4	368.3	368.0
7.5°	366.5	366.2	365.8	365.6	365.4	365.0	364.4	364.1	363.6	362.9	362.6
10°	362.1	361.5	361.1	360.4	360.3	359.8	358.4	357.7	356.7	355.9	355.0
12.5°	356.7	356.2	355.2	354.3	353.7	352.5	351.3	350.2	348.9	347.2	345.8
15°	350.2	349.4	347.4	347.2	346.3	344.4	342.8	340.7	338.8	336.9	335.2
17.5°	341.4	339.6	338.7	337.4	336.5	334.0	332.2	329.9	327.3	325.1	322.8
20°	329.9	328.0	326.3	325.7	324.4	322.2	320.0	317.2	314.6	311.8	309.8
22.5°	316.2	315.0	312.5	311.7	310.2	308.0	305.4	302.7	300.2	297.2	294.4
25°	301.6	299.8	297.9	296.2	295.1	293.1	289.8	287.7	285.0	281.7	279.6
27.5°	285.9	283.9	281.2	280.1	279.1	276.4	273.6	271.0	268.8	266.0	264.2
30°	267.9	266.4	264.6	263.2	261.8	259.7	257.2	254.2	251.8	250.5	248.0
32.5°	249.5	248.3	246.0	245.3	243.8	242.0	240.2	238.0	235.5	233.5	231.6
35°	229.9	228.7	227.1	225.8	225.3	224.0	222.1	220.2	219.0	216.7	215.7
37.5°	210.4	209.9	208.3	207.1	206.7	205.1	204.2	202.8	201.0	200.5	199.4
40°	190.2	189.9	189.0	188.9	188.0	187.6	186.2	185.2	184.3	183.9	183.2
42.5°	171.7	171.5	170.6	170.8	170.0	169.7	169.5	168.6	167.9	167.1	167.2
45°	153.5	153.2	152.7	152.4	152.8	152.7	152.4	152.0	152.0	152.1	151.7
47.5°	136.0	136.3	135.7	136.0	136.0	135.6	135.6	136.1	136.3	136.5	136.8
50°	119.4	120.2	120.0	120.4	120.5	120.7	120.2	120.9	120.8	122.0	121.7
52.5°	104.4	104.5	105.0	105.2	105.3	105.4	106.1	106.7	106.8	107.4	108.3
55°	89.8	90.0	91.1	91.1	91.8	91.9	92.9	93.1	93.5	95.0	95.3
57.5°	76.1	77.0	77.5	77.8	78.2	78.9	79.4	80.7	81.3	82.3	83.3
60°	63.8	64.8	65.5	65.7	66.3	67.1	67.8	69.2	70.4	71.5	72.2
62.5°	52.5	53.3	53.8	54.8	54.8	55.5	57.1	57.9	59.3	60.3	61.5
65°	42.3	42.9	43.8	43.8	44.4	45.5	46.8	48.1	49.4	50.8	52.0
67.5°	33.1	33.6	34.1	34.6	34.9	36.3	37.4	39.2	40.4	41.4	42.9
70°	25.1	25.3	26.0	26.6	27.0	27.9	29.2	30.4	31.6	32.7	34.2
72.5°	17.9	18.5	19.2	19.6	19.9	20.5	21.8	23.0	24.1	25.2	26.0
75°	12.3	12.7	13.0	13.4	13.8	14.4	15.2	16.0	17.3	18.4	19.3
77.5°	7.7	8.1	8.5	8.6	8.8	9.3	9.9	10.7	11.5	12.3	13.0
80°	4.5	4.7	4.8	4.9	5.2	5.6	5.9	6.4	7.0	7.5	8.2
82.5°	2.3	2.5	2.6	2.6	2.6	2.7	3.1	3.4	3.6	3.8	4.2
85°	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.4	1.4	1.5	1.6
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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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CATALOG NUMBER: LD4C08D010 EU4089030 4LBLDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9
2.5°	371.5	371.5	371.5	371.4	371.5	371.5	371.5	371.4
5°	368.0	367.7	367.7	367.6	367.4	367.4	367.6	367.3
7.5°	362.1	361.7	361.4	361.4	361.3	361.1	361.1	360.4
10°	354.4	353.6	353.6	353.3	352.2	352.1	351.8	351.8
12.5°	344.8	343.9	343.3	342.6	342.0	341.4	341.3	340.7
15°	333.5	332.2	331.3	331.0	329.9	329.1	329.1	328.8
17.5°	321.1	319.2	318.5	317.9	316.3	316.2	315.9	314.7
20°	307.2	305.4	304.4	303.7	302.8	301.4	301.1	301.3
22.5°	292.5	290.1	289.2	288.5	287.6	286.4	286.4	285.4
25°	277.3	275.1	274.3	273.5	272.0	271.4	270.7	270.9
27.5°	261.8	259.8	259.1	257.6	256.6	256.0	255.3	255.3
30°	245.7	244.6	243.5	243.4	241.4	240.6	239.9	239.4
32.5°	230.1	228.7	228.2	227.6	226.6	225.6	225.4	224.5
35°	214.7	213.4	212.7	212.1	211.0	210.6	210.2	210.5
37.5°	198.6	198.3	197.9	197.2	196.5	196.4	195.8	196.5
40°	182.7	182.6	182.0	182.1	182.1	181.9	182.1	182.1
42.5°	167.3	167.3	166.8	167.1	167.2	167.5	167.9	168.2
45°	152.4	152.3	152.4	152.7	152.4	153.1	153.7	154.1
47.5°	137.1	137.2	137.8	137.9	138.2	139.1	139.1	139.1
50°	122.4	123.1	122.8	123.7	123.5	124.1	123.5	123.5
52.5°	108.5	109.1	109.3	109.4	110.2	110.4	110.4	110.2
55°	96.0	97.0	96.5	97.2	97.6	97.9	98.3	98.1
57.5°	84.5	84.9	85.3	85.5	86.0	86.3	86.6	86.3
60°	73.1	74.0	74.6	74.8	75.0	75.3	75.5	75.9
62.5°	62.4	63.8	64.1	64.2	64.9	65.3	65.6	65.9
65°	53.0	54.0	54.6	55.1	55.6	55.6	56.0	56.0
67.5°	43.8	44.8	45.2	45.5	46.3	46.4	47.1	47.1
70°	35.5	36.2	36.4	36.8	37.7	38.2	38.5	38.8
72.5°	27.4	28.2	28.6	29.2	29.7	30.1	30.3	30.7
75°	20.0	21.2	21.4	21.9	22.3	22.9	23.1	23.0
77.5°	14.0	14.4	14.9	15.2	15.6	16.0	16.4	16.4
80°	8.6	9.2	9.3	9.4	10.0	10.3	10.5	10.5
82.5°	4.5	4.8	5.1	5.2	5.5	5.5	5.6	5.8
85°	1.8	1.9	1.9	1.9	2.1	2.2	2.2	2.2
87.5°	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4
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)