

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: P246098

Luminaire Tested: **LSR8B20D010 EC8B20930 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20930 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1795.8 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

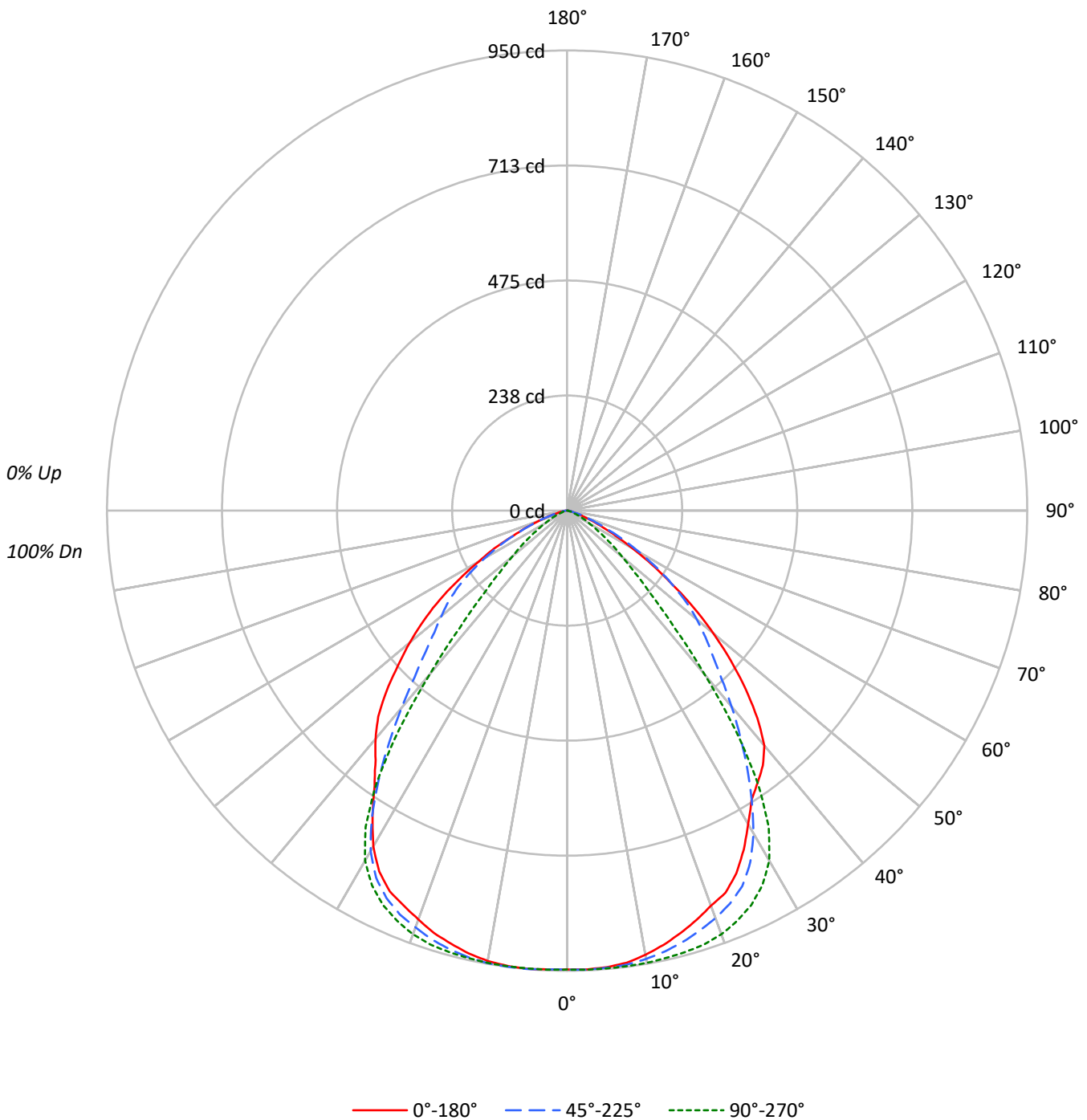
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90						
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79						
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70						
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62						
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55						
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50						
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45						
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41						
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37						
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34						

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	5.0
10°-20°	262.6	14.6
20°-30°	398.6	22.2
30°-40°	418.6	23.3
40°-50°	313.9	17.5
50°-60°	201.4	11.2
60°-70°	86.2	4.8
70°-80°	20.3	1.1
80°-90°	3.8	0.2
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°	751.6	41.9
0°-40°	1170.3	65.2
0°-60°	1685.6	93.9
0°-90°	1795.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1795.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	948	948	948	948	948	
5°	946	948	949	950	950	90
15°	903	922	943	937	926	255
25°	826	855	899	882	867	378
35°	686	648	686	678	693	430
45°	521	426	245	414	528	399
55°	263	263	91	275	321	239
65°	79	94	29	120	122	85
75°	12	14	4	24	24	18
85°	4	3	2	4	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5
2.5°	948.0	949.0	948.6	948.6	948.0	948.6	948.6	949.6	949.6	948.6	948.0
5°	946.0	947.0	947.0	946.0	946.0	948.6	947.0	948.0	948.0	947.5	947.5
7.5°	941.4	941.4	943.4	942.0	942.0	943.4	943.0	944.0	945.0	945.5	945.5
10°	931.2	932.2	932.8	932.8	933.2	934.8	935.8	937.8	938.8	939.8	940.4
12.5°	918.5	920.0	920.6	920.0	921.6	923.6	926.2	928.7	930.2	932.2	933.8
15°	903.3	903.3	904.3	905.8	906.9	909.9	912.4	915.5	919.6	922.1	924.6
17.5°	886.5	887.5	889.1	889.1	891.1	896.1	897.7	902.3	906.9	909.4	914.5
20°	868.2	869.2	870.7	871.8	874.3	878.3	881.4	885.5	890.5	895.1	900.3
22.5°	854.0	852.0	853.0	854.0	856.4	860.0	863.6	868.7	873.8	878.3	883.5
25°	826.5	827.0	828.5	829.5	832.6	835.6	839.7	845.8	850.4	855.4	861.0
27.5°	789.3	789.9	792.4	792.4	794.9	800.1	802.5	807.7	813.7	818.9	825.5
30°	747.1	748.2	748.2	750.2	751.7	754.2	756.8	761.8	765.0	769.6	778.6
32.5°	708.5	709.5	709.0	708.5	706.9	706.5	705.9	706.9	708.0	709.5	713.1
35°	685.6	683.0	681.0	677.4	673.4	668.3	663.7	657.6	652.0	647.5	642.3
37.5°	663.7	663.2	660.2	655.1	646.9	637.7	627.1	613.9	600.6	586.4	572.7
40°	633.3	631.7	629.1	622.0	612.9	601.6	587.4	571.1	549.7	527.9	505.6
42.5°	581.4	581.8	578.8	573.2	564.5	553.9	539.1	521.3	498.4	472.5	443.5
45°	520.8	520.8	519.8	515.2	509.2	500.4	489.3	474.5	452.1	425.6	394.7
47.5°	457.7	458.3	456.7	455.7	453.1	447.6	439.4	428.2	412.5	387.1	356.0
50°	393.7	393.7	396.2	395.7	395.7	393.7	390.1	383.5	369.7	349.4	320.4
52.5°	329.6	330.6	332.2	334.2	336.6	340.8	336.6	333.6	325.0	309.2	284.3
55°	263.4	264.4	267.0	270.6	273.6	277.7	278.7	278.7	274.1	263.4	244.6
57.5°	207.0	205.5	207.5	210.5	214.7	218.7	221.7	225.3	224.8	217.7	202.5
60°	155.6	156.2	157.6	160.8	163.8	167.4	171.4	174.4	176.0	172.4	162.8
62.5°	113.4	113.4	115.5	118.5	120.1	125.1	127.7	129.1	130.7	130.1	124.1
65°	79.4	80.4	81.4	83.0	84.4	87.4	89.0	92.0	93.0	93.6	89.0
67.5°	55.9	54.4	55.5	56.5	58.0	60.0	63.1	63.1	64.6	64.6	61.5
70°	35.6	35.6	36.1	37.7	38.7	39.1	40.1	41.1	42.7	42.3	42.3
72.5°	23.9	23.4	23.9	24.4	24.9	26.5	26.5	26.9	28.0	28.5	26.5
75°	12.2	12.7	13.7	13.2	14.8	13.7	14.2	15.8	15.2	14.2	14.2
77.5°	10.2	10.2	10.2	9.6	10.6	10.6	10.2	11.2	10.6	10.6	10.2
80°	7.2	7.6	7.2	6.6	7.2	6.6	6.6	6.6	6.6	6.6	6.1
82.5°	5.6	4.6	5.0	4.6	5.0	5.0	4.6	4.0	4.0	4.6	4.0
85°	4.0	3.0	3.6	3.6	3.0	3.0	3.0	3.0	3.0	2.6	2.6
87.5°	2.6	1.6	1.6	1.6	2.0	2.0	2.0	1.6	2.0	2.0	1.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5
2.5°	949.0	948.6	949.6	949.0	949.0	948.6	949.0	948.6	949.6	947.5	948.0
5°	949.0	948.0	948.6	949.0	949.6	948.6	948.6	948.6	949.6	948.6	949.0
7.5°	947.0	946.5	948.0	949.0	948.6	948.0	949.0	948.6	949.6	949.0	950.0
10°	943.0	943.4	944.4	946.0	946.5	947.0	948.0	948.0	949.6	947.5	948.6
12.5°	936.8	938.8	941.4	942.4	944.4	944.4	945.5	946.0	947.0	946.5	948.0
15°	929.2	931.8	934.8	937.4	939.8	941.4	943.0	943.4	945.0	943.4	944.0
17.5°	920.0	923.1	927.7	930.8	934.8	936.4	938.4	939.4	941.0	939.8	940.4
20°	907.3	910.9	916.0	920.6	923.1	926.6	929.2	930.8	931.8	930.8	931.2
22.5°	889.5	894.7	901.3	904.8	909.9	912.9	913.5	917.0	919.6	917.0	918.0
25°	868.7	873.8	878.9	886.5	891.1	894.7	898.1	898.7	901.3	900.7	900.3
27.5°	834.1	840.8	849.4	855.4	861.6	867.2	871.2	872.3	874.8	873.8	874.3
30°	786.8	793.9	802.1	811.7	820.3	826.0	831.0	834.6	837.2	835.6	835.1
32.5°	719.7	726.7	735.5	745.1	755.3	763.4	769.6	774.1	777.2	776.1	773.6
35°	642.9	644.9	650.5	658.1	666.8	675.4	681.0	686.1	689.6	690.6	690.6
37.5°	564.1	557.5	553.3	553.3	558.5	562.0	567.1	570.1	575.7	577.8	579.3
40°	487.7	472.5	458.3	447.6	440.4	440.0	440.0	441.4	446.6	453.1	459.3
42.5°	419.6	395.2	373.3	353.5	339.2	331.1	327.6	328.0	332.2	338.2	348.4
45°	365.2	334.6	307.2	283.3	264.0	251.2	245.2	244.6	247.7	254.8	266.0
47.5°	323.0	290.5	259.4	231.9	211.1	197.3	190.2	188.2	190.2	196.8	210.1
50°	287.9	254.4	222.3	193.8	171.4	157.2	150.6	148.0	150.6	156.2	169.4
52.5°	255.4	220.7	190.7	163.2	139.3	127.1	120.1	118.5	120.1	126.7	137.3
55°	217.7	188.2	158.7	131.3	110.4	98.2	92.6	91.0	92.6	98.6	109.9
57.5°	180.6	155.1	129.1	104.3	86.4	75.8	70.7	68.6	72.2	76.3	89.6
60°	146.0	125.7	103.8	81.8	67.1	57.5	53.4	52.9	53.9	59.0	68.2
62.5°	114.5	97.6	80.4	62.6	50.3	46.3	41.1	40.7	41.7	44.7	51.9
65°	82.4	71.7	58.5	45.7	36.1	30.5	28.5	29.0	30.0	32.1	38.7
67.5°	57.5	49.9	40.7	32.1	24.9	22.4	20.4	19.8	20.4	23.9	27.5
70°	38.7	34.1	27.5	24.4	17.3	13.7	14.2	12.7	14.8	14.8	17.8
72.5°	25.4	22.4	18.3	14.2	12.2	9.6	9.6	9.2	10.2	10.6	13.2
75°	13.2	10.2	10.2	7.2	5.0	2.6	4.6	4.0	3.6	4.0	5.0
77.5°	9.2	7.6	7.2	5.6	5.0	4.0	4.0	4.0	4.0	4.6	5.0
80°	5.6	5.6	4.0	3.6	3.0	2.6	3.0	3.0	3.0	3.0	3.6
82.5°	3.6	3.0	3.0	2.6	2.6	2.0	2.0	2.0	2.0	2.0	3.0
85°	3.0	2.0	2.0	1.6	2.0	3.6	1.6	2.0	2.0	2.0	1.6
87.5°	1.0	1.6	1.6	1.6	1.0	0.6	1.0	1.6	1.6	2.6	2.0
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°	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5	947.5
2.5°	949.0	949.6	949.6	949.0	949.0	948.0	950.0	948.6	949.0	951.1	949.6
5°	950.0	950.6	950.6	950.0	950.0	950.0	950.6	950.6	950.0	949.6	950.6
7.5°	952.1	951.6	951.6	950.6	950.6	949.6	950.6	949.0	950.0	949.0	950.6
10°	949.6	950.0	949.6	949.0	949.0	948.6	948.6	947.0	947.5	946.0	947.0
12.5°	948.0	947.5	947.5	946.5	945.5	944.4	944.0	942.4	942.4	938.8	940.4
15°	944.0	944.4	943.0	941.0	939.8	937.4	936.4	934.2	932.2	929.8	930.2
17.5°	940.4	938.8	936.8	934.8	930.8	928.7	926.6	923.6	922.6	919.6	918.5
20°	929.8	928.7	926.2	922.6	920.0	915.5	913.5	910.4	907.9	904.8	903.3
22.5°	916.0	915.0	911.9	908.3	904.3	902.3	900.3	894.7	892.1	889.1	888.5
25°	898.7	897.1	894.1	890.1	888.1	882.5	880.4	876.3	875.3	872.3	871.8
27.5°	872.3	870.2	866.6	861.6	858.0	854.4	852.4	849.4	848.4	845.2	844.8
30°	832.6	830.0	822.9	820.9	814.7	811.3	811.3	807.1	807.7	805.7	805.7
32.5°	770.0	766.0	760.4	756.3	752.2	750.2	750.2	748.6	749.7	749.7	750.7
35°	687.2	681.6	678.4	676.0	676.0	678.0	684.0	685.6	688.6	691.2	693.2
37.5°	580.8	580.3	583.9	587.0	594.6	603.2	613.9	623.1	631.7	637.7	643.9
40°	465.9	478.6	488.8	503.0	514.7	531.5	550.9	566.6	581.4	592.0	603.2
42.5°	363.7	379.9	401.3	422.2	443.0	465.9	491.3	513.2	532.5	547.3	558.9
45°	283.3	305.7	331.6	358.0	385.1	413.5	440.0	462.3	482.7	497.9	509.6
47.5°	228.3	252.8	282.3	311.3	341.8	371.8	401.3	420.6	437.4	449.6	460.3
50°	188.7	214.7	245.6	278.7	309.2	339.2	364.7	383.5	397.2	407.9	414.5
52.5°	157.6	185.1	218.1	251.2	281.7	309.2	332.2	346.4	357.6	365.2	371.3
55°	130.1	156.6	187.7	218.7	248.7	274.6	293.5	304.1	312.8	317.4	320.9
57.5°	106.3	130.7	159.2	187.7	213.7	235.0	249.8	260.4	264.4	268.0	267.5
60°	83.4	106.3	132.3	156.6	179.0	196.3	207.0	213.1	216.1	217.7	216.7
62.5°	65.6	86.4	106.3	127.7	143.9	158.7	168.8	168.8	170.4	170.8	172.4
65°	48.9	64.6	81.8	97.6	110.9	120.5	126.1	127.7	129.7	129.1	128.1
67.5°	36.1	47.9	60.5	72.2	81.4	87.4	91.6	95.1	94.6	93.6	93.0
70°	24.9	32.5	43.7	50.9	57.5	63.6	64.6	65.1	65.6	66.1	65.1
72.5°	17.3	22.9	29.0	35.1	39.1	41.7	44.3	44.7	44.7	44.7	44.3
75°	8.6	11.7	17.3	19.8	23.4	24.4	26.5	26.5	28.0	25.9	25.4
77.5°	7.6	9.2	12.2	14.2	15.8	17.3	17.8	19.3	18.8	17.8	18.3
80°	4.6	5.6	7.6	8.6	10.6	11.2	11.7	12.2	11.7	12.2	12.2
82.5°	3.6	4.0	5.0	5.0	6.6	6.6	7.2	7.2	7.6	7.6	7.6
85°	2.0	3.6	3.0	6.1	4.0	4.0	5.0	6.1	5.0	5.0	6.1
87.5°	2.0	2.0	1.6	2.0	2.0	2.0	2.6	3.0	3.0	3.6	3.0
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):

	165°	170°	175°	180°
0°	947.5	947.5	947.5	947.5
2.5°	949.0	950.0	948.6	948.0
5°	950.6	950.6	949.6	949.6
7.5°	950.6	950.6	949.0	948.0
10°	946.5	946.5	945.0	944.0
12.5°	938.8	938.8	938.4	936.8
15°	929.2	929.2	927.2	925.6
17.5°	916.0	917.0	914.5	914.5
20°	901.7	901.3	899.3	898.1
22.5°	887.0	886.0	885.5	882.5
25°	871.2	870.2	868.7	867.2
27.5°	844.2	843.8	842.2	840.2
30°	803.1	802.5	800.5	800.5
32.5°	749.7	749.2	747.1	747.6
35°	694.2	696.3	695.2	693.2
37.5°	647.9	649.5	650.5	649.5
40°	609.3	613.9	614.4	615.4
42.5°	568.1	574.2	576.2	577.2
45°	518.8	524.4	529.0	527.9
47.5°	468.5	472.5	476.5	473.5
50°	420.2	422.6	424.2	424.2
52.5°	374.3	374.3	373.9	374.3
55°	322.0	322.0	319.9	320.9
57.5°	267.0	268.0	266.5	264.0
60°	216.1	213.7	212.5	211.1
62.5°	168.4	168.4	164.8	169.4
65°	126.1	124.7	123.1	122.5
67.5°	91.6	91.0	89.6	89.0
70°	64.6	62.6	62.1	61.0
72.5°	43.3	43.3	42.3	42.3
75°	26.5	23.9	23.4	23.9
77.5°	18.3	17.8	17.8	17.3
80°	12.2	11.7	12.7	11.2
82.5°	7.6	8.2	7.6	8.2
85°	5.0	6.1	5.6	5.6
87.5°	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0

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