

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: P245522

Luminaire Tested: **LSR8B20D010 EC8B209730 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B209730 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1651.0 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

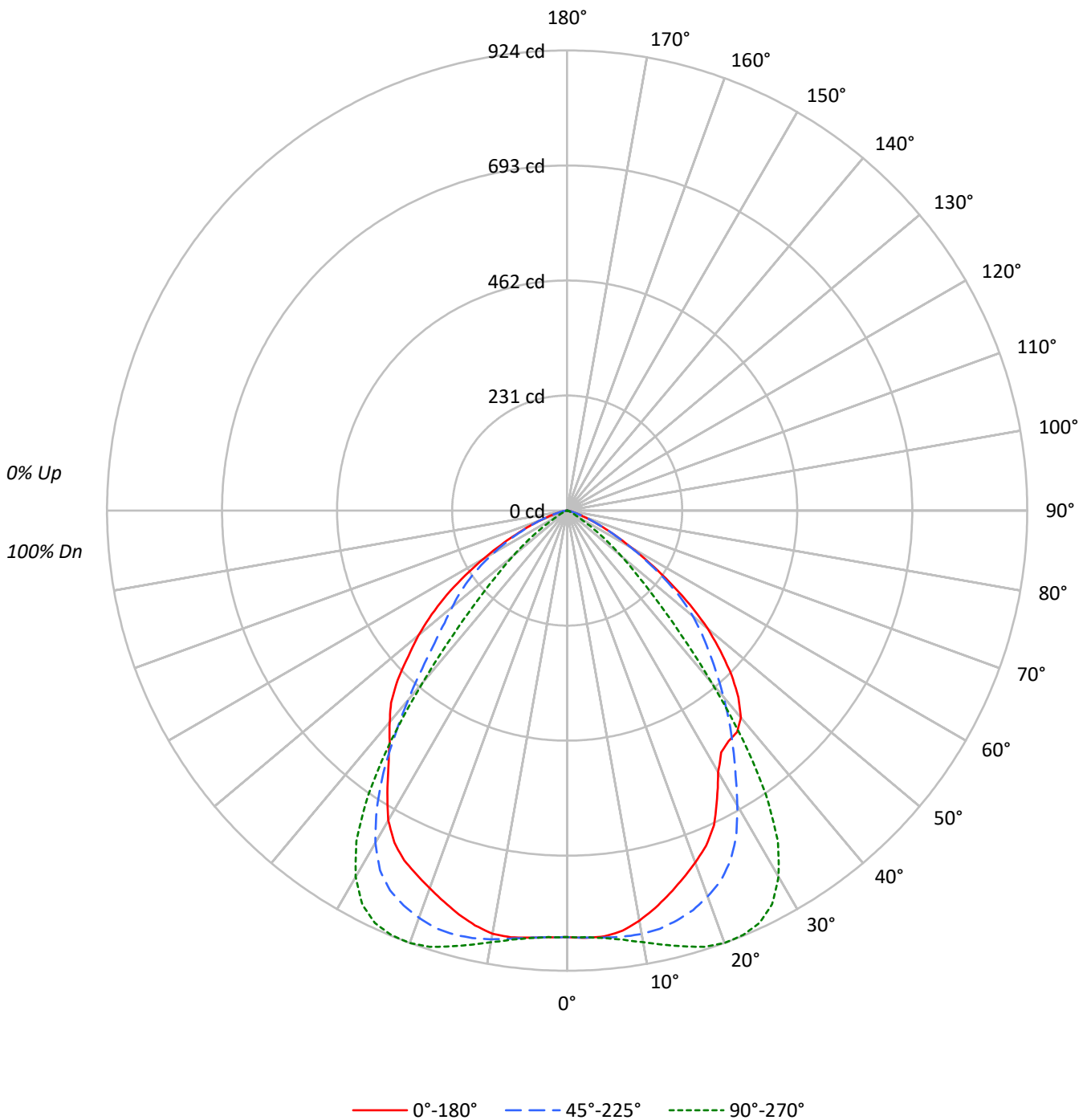
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	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	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	82.4	5.0
10°-20°	244.0	14.8
20°-30°	372.2	22.5
30°-40°	388.4	23.5
40°-50°	291.8	17.7
50°-60°	179.5	10.9
60°-70°	73.1	4.4
70°-80°	17.2	1.0
80°-90°	2.4	0.1
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°	698.6	42.3
0°-40°	1087.1	65.8
0°-60°	1558.4	94.4
0°-90°	1651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1651.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	856	856	856	856	856	
5°	858	861	862	861	861	81
15°	796	852	906	881	840	224
25°	697	776	914	842	775	317
35°	565	581	696	643	625	357
45°	466	404	252	376	481	356
55°	252	239	66	239	295	226
65°	79	80	10	107	113	82
75°	14	14	2	24	25	16
85°	1	1	0	3	4	2
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°	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5
2.5°	858.8	857.4	858.8	858.8	859.2	858.3	858.8	859.2	858.3	858.3	858.3
5°	858.3	857.4	858.3	857.8	858.8	858.8	859.7	859.7	860.6	860.6	861.9
7.5°	851.0	849.2	851.0	852.4	853.3	855.1	857.4	859.2	861.0	862.9	865.1
10°	836.0	836.0	837.4	840.1	842.8	846.0	850.1	854.7	859.2	863.3	867.4
12.5°	817.4	816.0	818.7	822.4	826.5	831.5	837.8	844.7	851.9	860.1	866.5
15°	796.0	794.7	797.8	801.5	806.5	813.8	821.5	830.6	841.0	851.9	862.4
17.5°	774.2	773.7	776.9	781.9	786.0	793.7	803.8	814.7	826.5	841.0	854.7
20°	751.9	751.5	754.7	758.7	764.2	771.5	781.5	794.2	808.3	824.7	840.6
22.5°	728.7	729.2	731.9	736.5	741.0	748.7	759.2	771.9	787.4	805.1	822.8
25°	697.4	695.1	698.7	703.3	711.0	717.4	727.4	741.0	756.9	775.6	796.5
27.5°	651.9	651.5	654.6	658.7	665.5	673.3	684.2	698.3	715.1	735.6	756.0
30°	606.4	607.4	608.7	612.8	617.4	625.1	636.0	647.8	663.7	683.3	705.1
32.5°	575.5	575.5	577.4	580.1	583.3	587.4	595.1	603.7	616.0	629.6	645.5
35°	565.1	563.3	565.1	565.5	566.0	566.9	568.3	571.0	575.1	581.0	586.9
37.5°	560.5	559.2	559.2	557.4	555.1	552.4	548.7	544.6	540.1	534.2	529.6
40°	542.8	541.9	541.0	539.2	534.2	528.7	522.8	513.3	502.8	488.2	473.7
42.5°	508.7	507.8	507.3	503.7	499.2	492.8	486.0	476.0	462.8	444.2	423.2
45°	466.4	464.6	463.3	460.1	456.9	451.4	445.1	436.0	422.8	403.7	378.7
47.5°	417.3	416.4	416.0	414.6	411.4	408.2	404.2	396.9	385.1	366.9	341.0
50°	367.8	366.0	366.9	366.4	365.1	362.8	360.0	355.1	346.0	329.6	306.0
52.5°	310.9	310.9	310.5	311.9	312.3	311.9	312.3	306.9	299.1	286.9	266.9
55°	251.8	251.8	253.2	255.0	256.9	257.3	256.9	254.6	249.1	239.1	221.4
57.5°	196.4	195.5	198.2	200.9	202.8	204.6	203.2	201.4	198.2	190.0	176.4
60°	149.6	149.6	151.4	153.2	155.0	156.8	156.4	155.9	153.2	147.7	136.8
62.5°	110.0	110.5	110.5	111.8	113.6	115.5	116.8	115.5	114.1	110.5	103.2
65°	78.6	78.2	78.6	80.0	81.4	83.2	84.1	83.6	82.3	79.6	74.1
67.5°	52.7	52.3	54.1	54.6	55.5	57.3	56.8	57.3	56.8	54.6	50.0
70°	34.5	33.6	34.5	34.1	35.5	35.9	36.8	37.3	36.8	35.5	34.1
72.5°	21.4	20.9	21.4	21.8	22.3	22.7	23.6	23.6	23.2	22.3	20.5
75°	13.6	12.3	12.7	11.8	12.7	12.7	13.6	14.1	13.6	13.6	12.7
77.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.6	9.1	8.2	7.7
80°	4.1	4.1	4.5	4.5	4.5	5.0	4.5	4.5	4.5	5.0	3.6
82.5°	3.2	2.7	2.7	2.7	3.2	2.7	2.7	2.7	2.7	2.7	2.7
85°	1.4	1.8	1.4	0.9	1.4	1.4	1.8	1.4	1.4	1.4	1.8
87.5°	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.9	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5
2.5°	858.8	857.8	857.8	857.4	858.3	857.4	857.8	857.4	857.4	858.3	857.4
5°	861.9	862.4	861.5	861.0	862.4	862.4	862.4	861.5	861.5	861.9	861.5
7.5°	866.5	867.4	867.8	868.3	869.2	869.7	869.7	869.2	868.8	870.1	868.3
10°	871.5	872.9	875.6	876.9	879.2	879.2	880.1	880.1	879.2	880.1	879.7
12.5°	869.7	877.8	882.4	885.6	888.8	891.5	892.4	892.9	892.4	894.2	892.4
15°	872.9	879.7	886.9	892.4	898.3	901.5	902.4	906.0	906.9	907.4	904.7
17.5°	867.8	880.1	887.8	896.0	904.7	910.6	916.0	918.3	918.8	919.7	916.0
20°	856.5	870.1	881.9	893.8	903.8	912.9	917.4	923.8	922.0	925.6	920.6
22.5°	841.0	856.5	871.5	886.9	897.4	908.3	917.9	922.4	924.7	924.7	919.2
25°	816.5	834.7	851.0	866.9	882.9	896.0	906.9	913.8	915.1	914.7	908.3
27.5°	778.3	797.8	816.9	835.1	854.7	870.1	882.9	891.0	893.3	893.3	886.5
30°	725.6	746.5	765.1	786.9	806.9	824.2	841.9	849.2	853.3	853.3	845.6
32.5°	662.8	680.6	697.8	719.2	741.0	760.6	777.4	787.4	792.4	791.9	785.1
35°	594.6	603.3	616.5	632.4	651.9	670.1	686.5	696.0	704.6	704.2	697.8
37.5°	526.4	524.2	525.5	531.4	543.7	556.4	569.2	578.3	585.5	588.7	587.4
40°	459.6	447.8	436.4	432.3	433.2	437.8	444.6	451.4	459.6	463.7	465.5
42.5°	399.6	379.6	359.6	344.6	336.0	333.2	336.4	338.7	343.7	349.6	355.5
45°	351.4	324.6	298.2	275.0	260.5	251.8	250.0	251.8	254.6	260.5	268.2
47.5°	311.9	280.5	250.9	225.0	203.7	192.3	189.1	188.2	190.9	196.4	206.8
50°	276.9	245.5	212.8	182.7	160.5	147.7	143.2	141.4	144.6	148.7	158.2
52.5°	238.7	207.8	174.1	145.0	121.8	108.7	103.6	100.9	102.7	108.2	117.7
55°	197.3	168.7	138.2	108.2	85.9	73.6	67.7	65.9	67.7	73.6	83.2
57.5°	155.9	131.8	106.4	78.2	58.2	45.9	40.0	38.2	43.2	45.5	55.5
60°	121.8	102.3	80.5	57.3	40.0	30.5	24.5	23.2	25.5	29.5	37.7
62.5°	91.4	79.1	61.8	40.9	29.5	19.5	16.4	15.0	16.4	19.5	25.9
65°	66.4	56.8	43.2	30.0	20.0	14.5	10.9	10.0	11.4	13.6	19.1
67.5°	45.5	38.2	30.0	20.9	13.6	9.1	7.7	7.7	8.2	10.0	14.1
70°	29.5	25.0	19.1	13.6	9.1	6.8	5.9	5.0	5.9	7.3	9.5
72.5°	18.6	15.9	12.3	9.5	6.8	5.0	4.1	3.6	4.5	5.5	7.3
75°	11.4	8.6	6.4	5.0	3.6	3.6	3.6	1.8	2.3	3.6	4.5
77.5°	6.8	5.9	5.0	4.1	3.2	1.8	1.8	1.8	2.3	2.7	4.1
80°	3.6	3.2	2.3	2.3	1.8	1.4	1.8	1.4	0.9	2.3	2.7
82.5°	2.3	1.8	1.8	1.8	2.3	0.9	1.4	0.9	1.4	1.8	1.4
85°	1.4	1.4	1.4	0.9	2.3	0.9	0.9	0.5	0.5	0.9	0.9
87.5°	0.0	0.5	0.5	0.0	0.5	0.0	0.5	0.5	0.5	0.5	0.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5	856.5
2.5°	857.8	857.4	857.8	857.4	857.4	857.4	857.8	857.8	857.4	857.4	858.3
5°	861.5	861.5	861.5	861.0	860.6	860.6	861.5	861.5	860.1	861.5	861.5
7.5°	869.2	867.8	869.2	867.4	866.5	866.9	867.4	866.5	865.6	866.0	866.0
10°	879.2	877.8	877.8	876.5	875.1	874.2	873.3	871.0	868.8	868.3	866.5
12.5°	891.0	888.8	887.4	884.7	882.4	879.2	876.5	872.9	868.3	865.1	861.9
15°	902.9	899.2	896.0	891.5	886.5	881.0	875.1	869.2	861.9	855.6	850.1
17.5°	912.4	907.4	901.5	894.2	886.9	878.8	870.1	861.5	851.0	842.8	836.5
20°	915.6	908.3	900.6	891.0	881.5	870.1	859.2	847.8	836.0	827.4	820.1
22.5°	911.5	902.9	893.3	883.3	870.6	858.3	845.6	832.4	821.9	810.1	803.3
25°	900.1	889.7	879.2	867.4	855.1	841.5	827.8	814.2	801.5	795.1	786.5
27.5°	876.9	865.6	854.2	841.9	827.8	814.2	800.1	786.9	776.0	767.4	762.4
30°	836.0	822.8	809.7	796.5	784.2	770.1	756.9	746.0	735.1	728.3	723.3
32.5°	773.3	761.5	748.3	735.6	724.2	712.4	701.5	691.9	684.2	679.6	676.0
35°	688.7	676.9	666.9	657.8	648.3	643.3	636.5	631.0	627.8	626.0	625.5
37.5°	582.4	575.5	572.4	570.5	568.7	567.4	568.3	570.5	572.4	575.5	579.2
40°	468.7	474.6	476.4	482.8	488.7	496.4	505.1	515.1	523.3	533.7	541.0
42.5°	365.1	376.0	388.7	402.3	416.9	431.0	448.2	464.2	478.7	491.9	503.3
45°	280.5	297.3	316.4	336.0	355.5	376.0	396.9	416.4	433.7	447.8	459.6
47.5°	218.7	237.3	261.9	286.0	309.6	333.7	356.9	377.3	391.9	405.5	416.0
50°	173.2	194.6	221.4	249.1	275.0	300.5	325.0	344.1	358.7	369.6	377.3
52.5°	134.1	159.6	186.8	215.9	243.7	271.4	294.1	311.9	323.7	333.2	339.1
55°	100.0	125.0	154.1	184.1	212.3	239.1	260.5	276.0	286.4	291.9	295.0
57.5°	72.3	95.0	124.1	154.1	179.6	205.0	222.3	236.4	242.3	245.5	246.9
60°	52.7	73.6	99.6	125.5	149.6	170.0	185.0	194.6	199.1	200.9	200.5
62.5°	38.6	56.8	79.1	100.9	120.5	137.3	149.1	155.5	157.8	158.7	157.3
65°	29.5	43.6	62.7	79.6	94.6	106.8	115.5	119.6	120.9	120.5	119.6
67.5°	21.8	32.7	46.8	59.6	70.5	80.0	84.6	88.2	89.1	87.7	86.4
70°	15.5	24.1	34.1	42.7	50.9	56.4	61.4	61.8	61.8	61.4	60.5
72.5°	10.9	16.8	23.2	29.1	34.1	38.2	40.0	41.4	40.9	40.5	39.6
75°	7.3	10.5	16.8	18.2	22.7	24.1	25.9	25.9	26.4	25.0	25.0
77.5°	4.5	7.3	10.0	11.8	13.6	15.5	16.4	16.4	16.8	16.4	16.4
80°	2.7	4.5	5.5	8.2	8.2	9.5	10.0	10.5	9.5	10.9	9.5
82.5°	1.8	2.7	4.1	4.1	5.0	5.9	5.9	6.4	6.4	5.9	5.9
85°	1.4	1.8	2.3	2.7	2.7	3.2	2.7	2.7	3.2	3.6	3.2
87.5°	0.5	0.9	0.5	0.9	0.9	1.8	1.4	1.4	1.4	1.8	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):

	165°	170°	175°	180°
0°	856.5	856.5	856.5	856.5
2.5°	857.4	857.8	857.4	857.4
5°	861.5	861.0	861.5	860.6
7.5°	864.7	864.7	864.2	864.2
10°	864.7	862.9	862.9	862.9
12.5°	857.8	855.6	854.2	853.3
15°	846.0	841.9	840.1	839.7
17.5°	830.6	826.9	824.7	823.3
20°	812.8	809.2	806.5	806.9
22.5°	797.4	793.3	791.5	790.6
25°	781.9	776.9	775.6	774.7
27.5°	756.9	754.2	752.8	751.5
30°	718.7	717.4	715.1	718.3
32.5°	674.6	672.4	670.6	671.9
35°	626.0	624.6	626.0	625.1
37.5°	581.5	582.8	584.6	585.5
40°	546.4	551.4	553.3	554.2
42.5°	511.4	517.3	521.0	523.3
45°	468.2	474.2	478.2	481.0
47.5°	423.7	428.7	432.8	432.3
50°	383.2	386.0	387.8	389.6
52.5°	342.3	342.3	342.8	342.8
55°	296.0	295.0	294.6	295.0
57.5°	245.0	244.1	243.7	242.3
60°	198.7	195.9	194.1	194.1
62.5°	155.5	152.3	150.9	150.5
65°	116.8	116.4	113.6	113.2
67.5°	84.6	82.7	80.9	81.4
70°	59.6	56.8	56.8	55.9
72.5°	38.6	37.3	36.8	36.8
75°	24.1	24.1	23.2	25.0
77.5°	15.9	15.9	15.5	15.9
80°	9.5	9.5	9.5	9.1
82.5°	5.9	6.4	5.9	5.9
85°	3.2	3.6	2.7	4.1
87.5°	1.8	2.3	1.8	2.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)