

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1433318

Luminaire Tested: EHBR1-54-UNV-TASM-L930-UPL30

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433318
REPORT IS A COMBINATION OF REPORTS P1431872 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-54-UNV-TASM-L930-UPL30
Description: Elevate Round Highbay at, 54000 lumens, 3000K 90CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

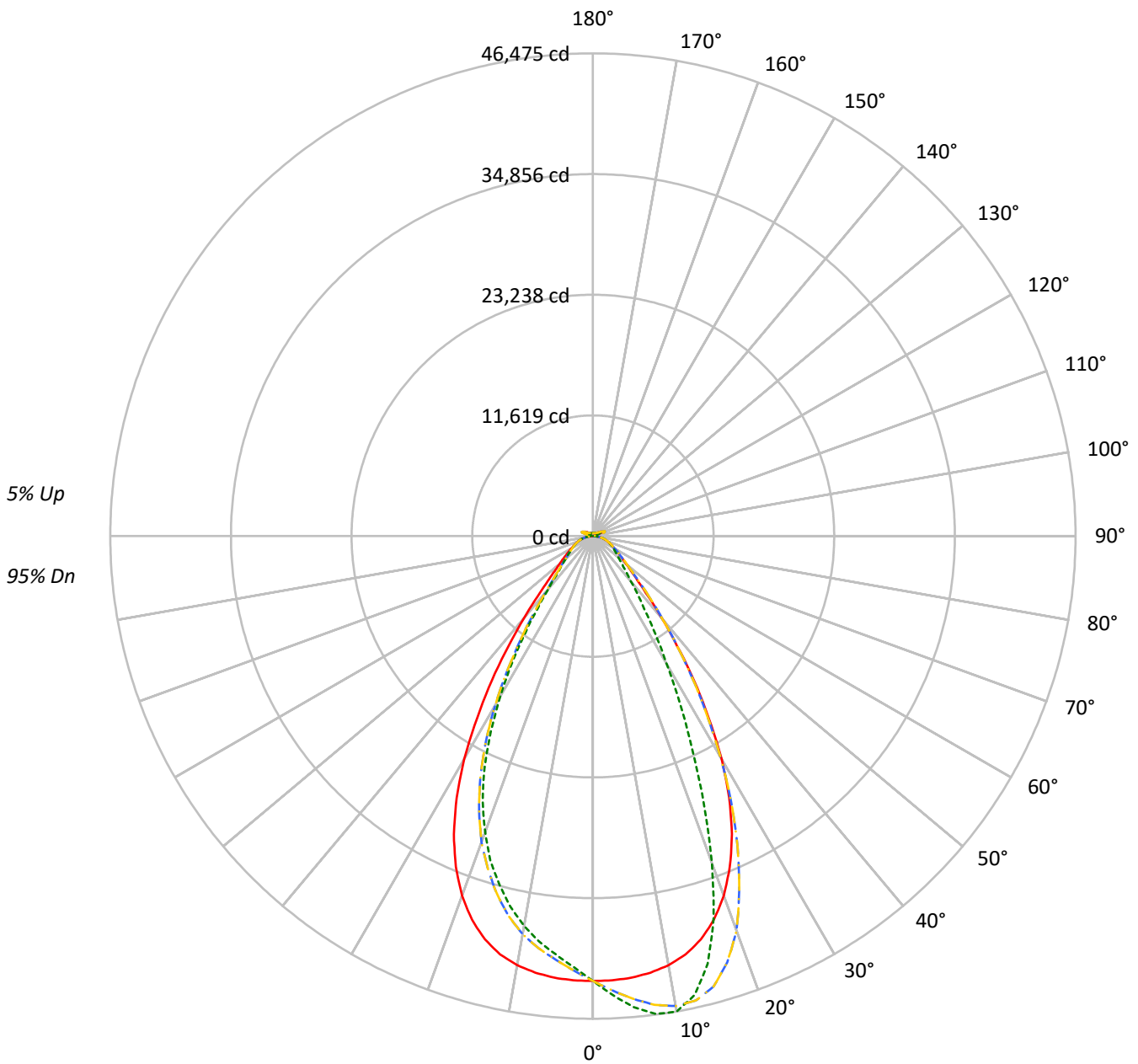
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50608.7 lumens
Efficiency: N/A
Efficacy: 159.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.84 / 0.9
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 318
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: 24 FT

TEST NUMBER: P1433318
CATALOG NUMBER: EHBR1-54-UNV-TASM-L930-UPL30

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	97	97	97	95
1	111	107	104	101	107	104	102	99	99	97	95	95	93	91	90	89	88	88	88	88	85
2	104	98	93	88	101	95	91	87	91	87	84	87	84	82	84	81	79	79	79	79	77
3	97	89	83	79	95	88	82	78	84	79	76	81	77	74	78	75	72	72	72	72	70
4	91	82	76	71	89	81	75	70	78	73	69	75	71	67	72	69	66	66	66	66	64
5	86	76	69	64	84	75	68	64	72	67	63	70	65	62	68	64	60	60	60	60	59
6	81	71	64	59	79	69	63	58	67	62	57	65	60	57	63	59	56	56	56	56	54
7	76	66	59	54	75	65	58	54	63	57	53	61	56	52	60	55	52	52	52	52	50
8	72	62	55	50	71	61	54	50	59	53	49	58	52	49	56	52	48	48	48	48	47
9	68	58	51	47	67	57	51	46	56	50	46	54	49	46	53	48	45	45	45	45	44
10	65	54	48	44	64	54	47	43	52	47	43	51	46	43	50	46	42	42	42	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	201135	201135	201135	201135
5°	199911	213268	199911	189537
10°	197453	218743	197453	179380
15°	191623	203280	191623	165699
20°	179216	163003	179216	147591
25°	158621	112938	158621	123688
30°	128794	73475	128794	92543
35°	92375	47584	92375	61608
40°	59724	32797	59724	38854
45°	37894	25405	37894	27683
50°	28141	21588	28141	23059
55°	22975	19666	22975	20355
60°	19895	18733	19895	18846
65°	18136	18066	18136	17990
70°	17190	17703	17190	17473
75°	16077	17124	16077	16612
80°	14122	16167	14122	15114
85°	9136	11542	9136	11007

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 53277 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4072.5	8.0
10°-20°	11079.5	21.9
20°-30°	12994.0	25.7
30°-40°	9036.5	17.9
40°-50°	4490.7	8.9
50°-60°	2685.9	5.3
60°-70°	1890.5	3.7
70°-80°	1217.8	2.4
80°-90°	391.6	0.8
90°-100°	73.8	0.1
100°-110°	476.5	0.9
110°-120°	879.3	1.7
120°-130°	523.4	1.0
130°-140°	317.7	0.6
140°-150°	220.8	0.4
150°-160°	145.3	0.3
160°-170°	84.6	0.2
170°-180°	28.4	0.1
0°-30°	28146.0	55.6
0°-40°	37182.5	73.5
0°-60°	44359.1	87.7
0°-90°	47859.0	94.6
90°-120°	1429.5	2.8
90°-150°	2491.4	4.9
90°-180°	2750.0	5.4
0°-180°	50608.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	42830	42830	42830	42830	42830	
5°	42684	45536	42684	40469	42684	4051
15°	40202	42647	40202	34763	40202	11235
25°	31676	22554	31676	24700	31676	14341
35°	16954	8733	16954	11307	16954	10584
45°	6131	4110	6131	4479	6131	5017
55°	3105	2658	3105	2751	3105	2839
65°	1893	1886	1893	1878	1893	1901
75°	1132	1206	1132	1170	1132	1189
85°	314	397	314	378	314	349
90°	20	26	20	20	20	24
95°	39	40	39	34	39	42
105°	219	114	219	166	219	295
115°	936	801	936	760	936	853
125°	600	630	600	549	600	552
135°	381	441	381	402	381	302
145°	346	362	346	336	346	217
155°	310	324	310	302	310	145
165°	296	307	296	291	296	84
175°	298	306	298	293	298	28
180°	298	298	298	298	298	



TEST NUMBER: P1433318
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L930-UPL30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	42830.2	42830.2	42830.2	42830.2	42830.2	42830.2	42830.2	42830.2	42830.2	42830.2	42830.2
2.5°	42805.4	43358.7	43806.8	44102.4	44248.6	44102.4	43806.8	43358.7	42805.4	42255.2	41876.9
5°	42684.1	43792.4	44731.3	45345.7	45536.0	45345.7	44731.3	43792.4	42684.1	41636.8	40942.1
7.5°	42394.1	44120.9	45516.0	46233.1	46408.3	46233.1	45516.0	44120.9	42394.1	40911.6	40033.8
10°	41951.7	44328.1	45940.0	46454.0	46474.9	46454.0	45940.0	44328.1	41951.7	39954.3	38919.0
12.5°	41245.7	44254.2	45797.8	45629.2	45246.1	45629.2	45797.8	44254.2	41245.7	38784.9	37478.9
15°	40201.6	43816.5	44897.5	43525.0	42647.1	43525.0	44897.5	43816.5	40201.6	37205.9	35691.2
17.5°	38730.3	42997.3	43018.2	40302.8	38646.8	40302.8	43018.2	42997.3	38730.3	35275.2	33607.1
20°	36834.1	41683.3	40430.5	35463.9	33501.9	35463.9	40430.5	41683.3	36834.1	32992.7	31355.9
22.5°	34456.8	39911.7	36826.8	30596.1	27919.3	30596.1	36826.8	39911.7	34456.8	30338.3	28634.9
25°	31676.4	37740.8	32950.1	25292.2	22553.6	25292.2	32950.1	37740.8	31676.4	27175.6	25635.2
27.5°	28406.0	34989.3	28822.1	20667.9	18141.1	20667.9	28822.1	34989.3	28406.0	23910.1	22336.7
30°	24773.4	31461.9	24526.0	16459.4	14132.8	16459.4	24526.0	31461.9	24773.4	20241.4	18832.6
32.5°	20706.4	28004.4	20400.3	13188.2	11217.3	13188.2	20400.3	28004.4	20706.4	16740.5	15268.3
35°	16954.1	23678.7	16680.3	10362.8	8733.3	10362.8	16680.3	23678.7	16954.1	13435.6	11989.9
37.5°	13305.5	19591.6	13296.7	8344.5	7083.7	8344.5	13296.7	19591.6	13305.5	10445.6	9272.1
40°	10351.6	15319.0	10418.2	6661.2	5684.6	6661.2	10418.2	15319.0	10351.6	7947.8	7196.8
42.5°	7843.4	11713.7	8188.8	5467.0	4828.5	5467.0	8188.8	11713.7	7843.4	6262.0	5699.8
45°	6131.1	8620.0	6394.6	4612.4	4110.5	4612.4	6394.6	8620.0	6131.1	5042.9	4665.4
47.5°	4993.1	6662.0	5182.6	3956.2	3604.5	3956.2	5182.6	6662.0	4993.1	4265.4	3982.8
50°	4194.0	5111.9	4303.2	3453.4	3217.4	3453.4	4303.2	5111.9	4194.0	3652.6	3464.0
52.5°	3602.9	4169.0	3664.7	3077.6	2918.6	3077.6	3664.7	4169.0	3602.9	3195.6	3078.4
55°	3104.9	3504.9	3186.8	2767.6	2657.6	2767.6	3186.8	3504.9	3104.9	2843.9	2757.2
57.5°	2726.6	2973.2	2767.6	2503.4	2430.3	2503.4	2767.6	2973.2	2726.6	2530.7	2484.1
60°	2391.7	2574.9	2442.3	2272.9	2252.0	2272.9	2442.3	2574.9	2391.7	2276.9	2246.4
62.5°	2133.9	2249.6	2159.6	2065.7	2047.2	2065.7	2159.6	2249.6	2133.9	2045.6	2051.2
65°	1893.0	2000.6	1929.9	1879.3	1885.7	1879.3	1929.9	2000.6	1893.0	1852.1	1860.9
67.5°	1706.6	1762.9	1732.4	1703.4	1710.6	1703.4	1732.4	1762.9	1706.6	1666.5	1680.2
70°	1508.3	1568.5	1537.2	1541.2	1553.3	1541.2	1537.2	1568.5	1508.3	1496.2	1506.7
72.5°	1318.7	1365.3	1354.9	1364.5	1377.3	1364.5	1354.9	1365.3	1318.7	1317.1	1317.9
75°	1132.5	1167.7	1172.6	1186.2	1206.3	1186.2	1172.6	1167.7	1132.5	1120.3	1134.9
77.5°	929.2	969.4	984.6	1003.2	1032.8	1003.2	984.6	969.4	929.2	937.2	944.5
80°	742.9	761.4	795.1	808.8	850.5	808.8	795.1	761.4	742.9	729.2	739.6
82.5°	543.7	560.6	589.5	615.2	639.3	615.2	589.5	560.6	543.7	537.3	538.1
85°	314.0	339.7	359.0	389.5	396.7	389.5	359.0	339.7	314.0	321.3	314.0
87.5°	110.1	118.1	134.9	146.9	147.8	146.9	134.9	118.1	110.1	112.5	102.0
90°	20.4	34.8	59.8	35.0	26.0	35.0	59.8	34.8	20.4	35.6	55.2
92.5°	26.5	46.9	83.9	45.5	33.6	45.5	83.9	46.9	26.5	46.1	88.4
95°	39.4	57.5	106.6	50.1	39.7	50.1	106.6	57.5	39.4	61.2	123.1
97.5°	60.5	71.0	120.2	53.1	47.1	53.1	120.2	71.0	60.5	74.8	141.2
100°	80.1	80.1	218.3	60.7	53.2	60.7	218.3	80.1	80.1	92.2	219.8
102.5°	120.9	156.4	504.5	118.9	63.8	118.9	504.5	156.4	120.9	172.3	465.8
105°	219.0	355.7	886.5	301.6	114.4	301.6	886.5	355.7	219.0	359.5	829.7
107.5°	413.8	662.2	1141.6	591.4	260.8	591.4	1141.6	662.2	413.8	635.7	1094.8
110°	661.4	924.9	1245.8	808.9	523.6	808.9	1245.8	924.9	661.4	872.8	1147.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	860.8	1030.6	1217.1	896.4	722.9	896.4	1217.1	1030.6	860.8	963.4	1099.3
115°	935.5	1015.5	1087.3	893.5	801.4	893.5	1087.3	1015.5	935.5	940.8	981.5
117.5°	903.8	929.5	939.4	839.1	805.9	839.1	939.4	929.5	903.8	846.4	833.6
120°	816.2	805.7	792.1	759.1	760.7	759.1	792.1	805.7	816.2	739.2	696.2
122.5°	706.9	684.1	669.9	678.3	698.7	678.3	669.9	684.1	706.9	629.8	597.3
125°	599.6	576.9	584.6	608.8	630.1	608.8	584.6	576.9	599.6	535.5	527.1
127.5°	509.8	499.2	522.7	550.0	568.2	550.0	522.7	499.2	509.8	469.0	477.3
130°	445.7	447.9	478.9	502.4	513.8	502.4	478.9	447.9	445.7	426.1	446.4
132.5°	405.7	417.0	446.5	467.0	473.8	467.0	446.5	417.0	405.7	400.5	425.3
135°	380.9	397.4	424.6	437.5	440.7	437.5	424.6	397.4	380.9	383.2	405.7
137.5°	366.5	383.1	403.5	414.2	412.0	414.2	403.5	383.1	366.5	371.9	389.2
140°	358.3	374.8	383.9	396.0	394.7	396.0	383.9	374.8	358.3	361.4	374.9
142.5°	350.0	365.1	369.6	378.7	376.5	378.7	369.6	365.1	350.0	353.1	362.2
145°	346.3	357.6	353.8	365.2	362.2	365.2	353.8	357.6	346.3	347.0	352.4
147.5°	338.8	347.0	342.5	352.4	349.4	352.4	342.5	347.0	338.8	338.8	341.1
150°	330.5	336.6	329.7	341.1	341.2	341.1	329.7	336.6	330.5	329.0	331.3
152.5°	319.2	325.3	319.2	332.1	331.4	332.1	319.2	325.3	319.2	317.7	320.0
155°	310.3	313.3	310.3	323.1	323.9	323.1	310.3	313.3	310.3	309.5	311.1
157.5°	304.3	306.6	305.1	316.5	317.3	316.5	305.1	306.6	304.3	304.3	305.1
160°	300.0	303.0	302.3	312.2	313.0	312.2	302.3	303.0	300.0	300.7	301.5
162.5°	298.5	298.5	298.7	308.5	310.1	308.5	298.7	298.5	298.5	298.5	300.0
165°	296.5	298.0	296.6	304.1	307.3	304.1	296.6	298.0	296.5	297.2	297.2
167.5°	296.6	295.1	296.7	303.6	306.7	303.6	296.7	295.1	296.6	297.3	297.3
170°	294.3	295.1	295.2	302.2	305.3	302.2	295.2	295.1	294.3	295.9	296.6
172.5°	296.7	296.7	296.1	301.6	306.3	301.6	296.1	296.7	296.7	297.5	299.0
175°	298.4	297.6	297.7	301.7	306.4	301.7	297.7	297.6	298.4	297.6	297.6
177.5°	296.8	298.4	300.0	304.1	310.2	304.1	300.0	298.4	296.8	297.6	297.6
180°	298.4	298.4	298.4	298.4	298.4	298.4	298.4	298.4	298.4	298.4	298.4



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CATALOG NUMBER: EHBR1-54-UNV-TASM-L930-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	42830.2	42830.2	42830.2	42830.2	42830.2	42830.2
2.5°	41586.2	41558.9	41586.2	41876.9	42255.2	42805.4
5°	40620.0	40469.1	40620.0	40942.1	41636.8	42684.1
7.5°	39494.9	39407.3	39494.9	40033.8	40911.6	42394.1
10°	38310.2	38111.8	38310.2	38919.0	39954.3	41951.7
12.5°	36850.2	36587.5	36850.2	37478.9	38784.9	41245.7
15°	34993.3	34762.7	34993.3	35691.2	37205.9	40201.6
17.5°	33000.7	32791.9	33000.7	33607.1	35275.2	38730.3
20°	30498.2	30334.3	30498.2	31355.9	32992.7	36834.1
22.5°	27872.7	27719.4	27872.7	28634.9	30338.3	34456.8
25°	24783.9	24700.4	24783.9	25635.2	27175.6	31676.4
27.5°	21446.1	21303.9	21446.1	22336.7	23910.1	28406.0
30°	18036.0	17800.6	18036.0	18832.6	20241.4	24773.4
32.5°	14700.5	14531.1	14700.5	15268.3	16740.5	20706.4
35°	11476.7	11307.3	11476.7	11989.9	13435.6	16954.1
37.5°	8942.9	8643.3	8942.9	9272.1	10445.6	13305.5
40°	6782.5	6734.3	6782.5	7196.8	7947.8	10351.6
42.5°	5521.5	5390.6	5521.5	5699.8	6262.0	7843.4
45°	4530.5	4479.0	4530.5	4665.4	5042.9	6131.1
47.5°	3896.0	3918.5	3896.0	3982.8	4265.4	4993.1
50°	3423.0	3436.6	3423.0	3464.0	3652.6	4194.0
52.5°	3074.4	3062.3	3074.4	3078.4	3195.6	3602.9
55°	2766.0	2750.8	2766.0	2757.2	2843.9	3104.9
57.5°	2496.2	2507.4	2496.2	2484.1	2530.7	2726.6
60°	2255.2	2265.6	2255.2	2246.4	2276.9	2391.7
62.5°	2052.0	2058.4	2052.0	2051.2	2045.6	2133.9
65°	1870.5	1877.7	1870.5	1860.9	1852.1	1893.0
67.5°	1697.0	1697.0	1697.0	1680.2	1666.5	1706.6
70°	1534.0	1533.2	1534.0	1506.7	1496.2	1508.3
72.5°	1338.0	1357.3	1338.0	1317.9	1317.1	1318.7
75°	1147.7	1170.2	1147.7	1134.9	1120.3	1132.5
77.5°	954.9	989.4	954.9	944.5	937.2	929.2
80°	757.4	795.1	757.4	739.6	729.2	742.9
82.5°	559.8	587.9	559.8	538.1	537.3	543.7
85°	333.3	378.3	333.3	314.0	321.3	314.0
87.5°	106.8	136.5	106.8	102.0	112.5	110.1
90°	32.5	20.4	32.5	55.2	35.6	20.4
92.5°	49.1	29.5	49.1	88.4	46.1	26.5
95°	56.7	34.0	56.7	123.1	61.2	39.4
97.5°	62.7	43.8	62.7	141.2	74.8	60.5
100°	73.3	57.5	73.3	219.8	92.2	80.1
102.5°	154.8	96.7	154.8	465.8	172.3	120.9
105°	325.4	166.2	325.4	829.7	359.5	219.0
107.5°	582.1	286.9	582.1	1094.8	635.7	413.8
110°	772.4	534.6	772.4	1147.6	872.8	661.4



TEST NUMBER: P1433318

CATALOG NUMBER: EHBR1-54-UNV-TASM-L930-UPL30

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	829.7	721.8	829.7	1099.3	963.4	860.8
115°	798.0	759.5	798.0	981.5	940.8	935.5
117.5°	728.6	733.9	728.6	833.6	846.4	903.8
120°	648.6	679.5	648.6	696.2	739.2	816.2
122.5°	575.3	611.6	575.3	597.3	629.8	706.9
125°	512.0	548.9	512.0	527.1	535.5	599.6
127.5°	468.1	493.2	468.1	477.3	469.0	509.8
130°	434.3	455.4	434.3	446.4	426.1	445.7
132.5°	410.9	424.4	410.9	425.3	400.5	405.7
135°	390.5	401.8	390.5	405.7	383.2	380.9
137.5°	373.2	383.0	373.2	389.2	371.9	366.5
140°	358.2	366.4	358.2	374.9	361.4	358.3
142.5°	342.4	348.4	342.4	362.2	353.1	350.0
145°	331.9	336.5	331.9	352.4	347.0	346.3
147.5°	322.9	326.0	322.9	341.1	338.8	338.8
150°	314.0	317.1	314.0	331.3	329.0	330.5
152.5°	304.2	308.1	304.2	320.0	317.7	319.2
155°	298.3	302.1	298.3	311.1	309.5	310.3
157.5°	295.3	298.4	295.3	305.1	304.3	304.3
160°	293.3	295.6	293.3	301.5	300.7	300.0
162.5°	290.3	292.7	290.3	300.0	298.5	298.5
165°	290.4	291.2	290.4	297.2	297.2	296.5
167.5°	289.7	291.2	289.7	297.3	297.3	296.6
170°	290.5	291.3	290.5	296.6	295.9	294.3
172.5°	292.1	292.9	292.1	299.0	297.5	296.7
175°	292.2	293.0	292.2	297.6	297.6	298.4
177.5°	294.5	295.3	294.5	297.6	297.6	296.8
180°	298.4	298.4	298.4	298.4	298.4	298.4



TEST NUMBER: P1433318
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L930-UPL30

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.17	20.29	19.63	20.72	21.17	18.48	19.61	18.95	20.04	20.49
	3H	20.71	21.71	21.19	22.16	22.66	20.33	21.33	20.81	21.78	22.28
	4H	21.35	22.28	21.85	22.75	23.26	21.11	22.05	21.61	22.51	23.03
	6H	21.83	22.69	22.34	23.17	23.70	21.76	22.61	22.27	23.09	23.62
	8H	21.98	22.79	22.51	23.29	23.83	21.98	22.79	22.51	23.29	23.83
	12H	22.06	22.83	22.58	23.32	23.88	22.11	22.88	22.64	23.37	23.93
4H	2H	19.58	20.51	20.08	20.98	21.49	19.06	19.99	19.56	20.46	20.97
	3H	21.38	22.15	21.89	22.66	23.20	21.12	21.89	21.63	22.40	22.93
	4H	22.15	22.85	22.68	23.37	23.94	22.03	22.72	22.56	23.24	23.81
	6H	22.77	23.37	23.33	23.91	24.51	22.80	23.39	23.35	23.94	24.54
	8H	22.97	23.52	23.53	24.07	24.67	23.07	23.63	23.63	24.17	24.77
	12H	23.07	23.56	23.65	24.14	24.74	23.24	23.73	23.82	24.31	24.91
8H	4H	22.40	22.96	22.97	23.51	24.11	22.31	22.86	22.87	23.41	24.01
	6H	23.15	23.60	23.74	24.19	24.80	23.21	23.66	23.80	24.26	24.86
	8H	23.42	23.82	24.03	24.43	25.05	23.56	23.97	24.18	24.58	25.19
	12H	23.59	23.94	24.20	24.53	25.22	23.81	24.17	24.42	24.75	25.45
12H	4H	22.41	22.90	22.99	23.48	24.09	22.32	22.81	22.90	23.39	23.99
	6H	23.19	23.59	23.80	24.20	24.82	23.26	23.66	23.87	24.27	24.89
	8H	23.51	23.86	24.11	24.45	25.14	23.66	24.01	24.27	24.60	25.30

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-5
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/05/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **EHBR-60-L930-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 2996
 CIE u': 0.2519
 CIE v': 0.5169
 Duv: -0.0033
 CIE x: 0.4325
 CIE y: 0.3945
 CIE z: 0.1730
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 584
 Purity: 48.21818
 Rf: 91.3
 Rg: 102

CRI (Ra):	94.4		
R1:	96.8	R9:	61.4
R2:	98.1	R10:	94.4
R3:	97.8	R11:	95.7
R4:	95.6	R12:	88.5
R5:	96.9	R13:	97.3
R6:	95.7	R14:	97.8
R7:	90.9	R15:	92.3
R8:	83.0		



Test Conditions

Stabilization Time: 40M
 Operation Time: 1H 40M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-5

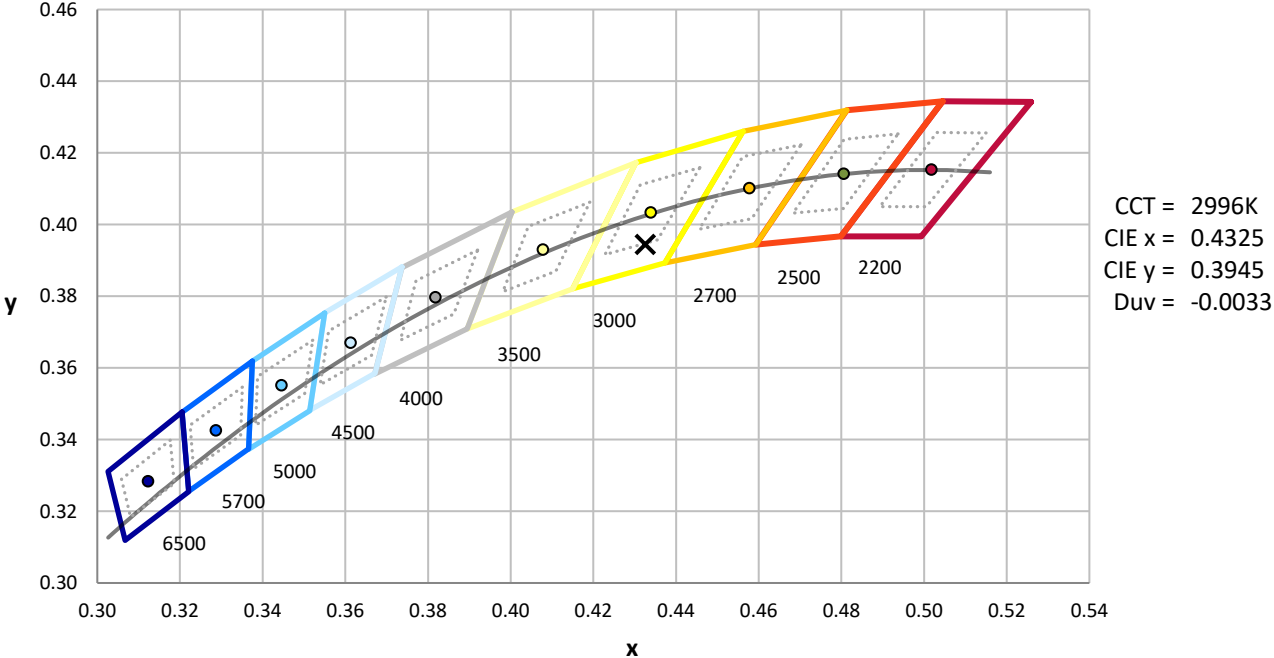
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2506-472-5

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Scotopic Flux vs. Wavelength



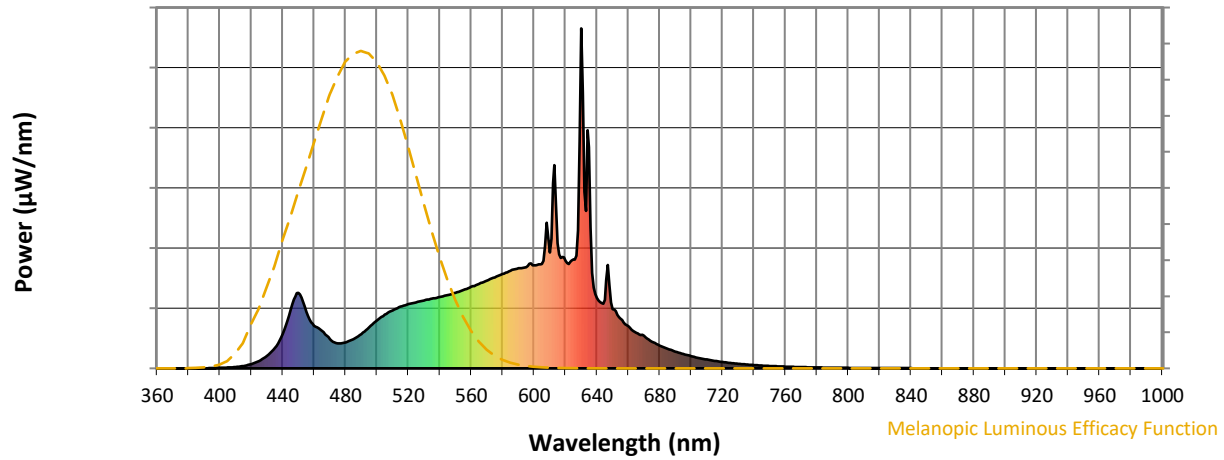
Scotopic Lumens: NR

S/P: 1.44

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-5

Melanopic Flux vs. Wavelength



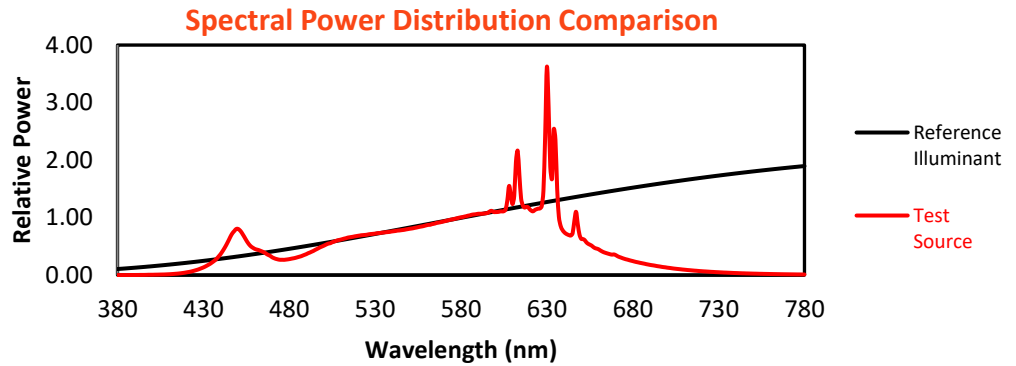
Melanopic Lumens: NR

M/P: 2.85

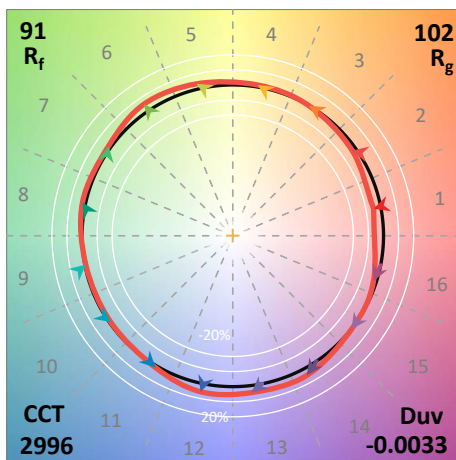
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	101	NR	620	317	NR	750	7	NR	880	0	NR
365	0	NR	495	121	NR	625	320	NR	755	6	NR	885	0	NR
370	0	NR	500	141	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	158	NR	635	651	NR	765	4	NR	895	0	NR
380	0	NR	510	171	NR	640	207	NR	770	4	NR	900	0	NR
385	0	NR	515	182	NR	645	201	NR	775	3	NR	905	0	NR
390	0	NR	520	189	NR	650	174	NR	780	3	NR	910	0	NR
395	1	NR	525	194	NR	655	146	NR	785	2	NR	915	0	NR
400	1	NR	530	199	NR	660	124	NR	790	2	NR	920	0	NR
405	3	NR	535	205	NR	665	105	NR	795	2	NR	925	0	NR
410	4	NR	540	210	NR	670	96	NR	800	1	NR	930	0	NR
415	7	NR	545	216	NR	675	79	NR	805	1	NR	935	0	NR
420	13	NR	550	222	NR	680	67	NR	810	1	NR	940	0	NR
425	22	NR	555	230	NR	685	58	NR	815	1	NR	945	0	NR
430	37	NR	560	240	NR	690	49	NR	820	1	NR	950	0	NR
435	60	NR	565	248	NR	695	42	NR	825	1	NR	955	0	NR
440	101	NR	570	258	NR	700	36	NR	830	1	NR	960	0	NR
445	172	NR	575	268	NR	705	30	NR	835	1	NR	965	0	NR
450	223	NR	580	278	NR	710	26	NR	840	1	NR	970	0	NR
455	167	NR	585	287	NR	715	22	NR	845	0	NR	975	0	NR
460	126	NR	590	295	NR	720	19	NR	850	0	NR	980	0	NR
465	111	NR	595	298	NR	725	16	NR	855	0	NR	985	0	NR
470	86	NR	600	303	NR	730	14	NR	860	0	NR	990	0	NR
475	74	NR	605	307	NR	735	12	NR	865	0	NR	995	0	NR
480	77	NR	610	341	NR	740	10	NR	870	0	NR	1000	0	NR
485	86	NR	615	368	NR	745	8	NR	875	0	NR			

Summary

$R_f = 91.3$
 $R_g = 102$
 $CIE R_a = 94.4$
 $R_9 = 61.4$



Color Vector Graphics



Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 91	CES51 = 96	CES76 = 89
CES02 = 63	CES27 = 96	CES52 = 95	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 93	CES78 = 86
CES04 = 70	CES29 = 90	CES54 = 98	CES79 = 89
CES05 = 51	CES30 = 96	CES55 = 98	CES80 = 91
CES06 = 51	CES31 = 90	CES56 = 95	CES81 = 72
CES07 = 44	CES32 = 84	CES57 = 95	CES82 = 95
CES08 = 42	CES33 = 91	CES58 = 95	CES83 = 93
CES09 = 29	CES34 = 92	CES59 = 99	CES84 = 96
CES10 = 76	CES35 = 96	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 90	CES61 = 96	CES86 = 77
CES12 = 65	CES37 = 94	CES62 = 95	CES87 = 91
CES13 = 44	CES38 = 99	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 96	CES89 = 82
CES15 = 72	CES40 = 94	CES65 = 92	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 95	CES91 = 82
CES17 = 50	CES42 = 91	CES67 = 94	CES92 = 78
CES18 = 57	CES43 = 88	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 94	CES94 = 73
CES20 = 67	CES45 = 93	CES70 = 90	CES95 = 85
CES21 = 86	CES46 = 93	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 95	CES73 = 85	CES98 = 94
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 93
CES25 = 72	CES50 = 96	CES75 = 90	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)