

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: McGRAW-EDISON

Report Number: P232755

Luminaire Tested: **CTN-10-4-D-E1-T5-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232755  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-21)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-10-4-D-E1-T5-7050  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 5000K LEDS AND TYPE V OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 44291 lumens  
Efficiency: N/A  
Efficacy: 143.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B5 - U0 - G5

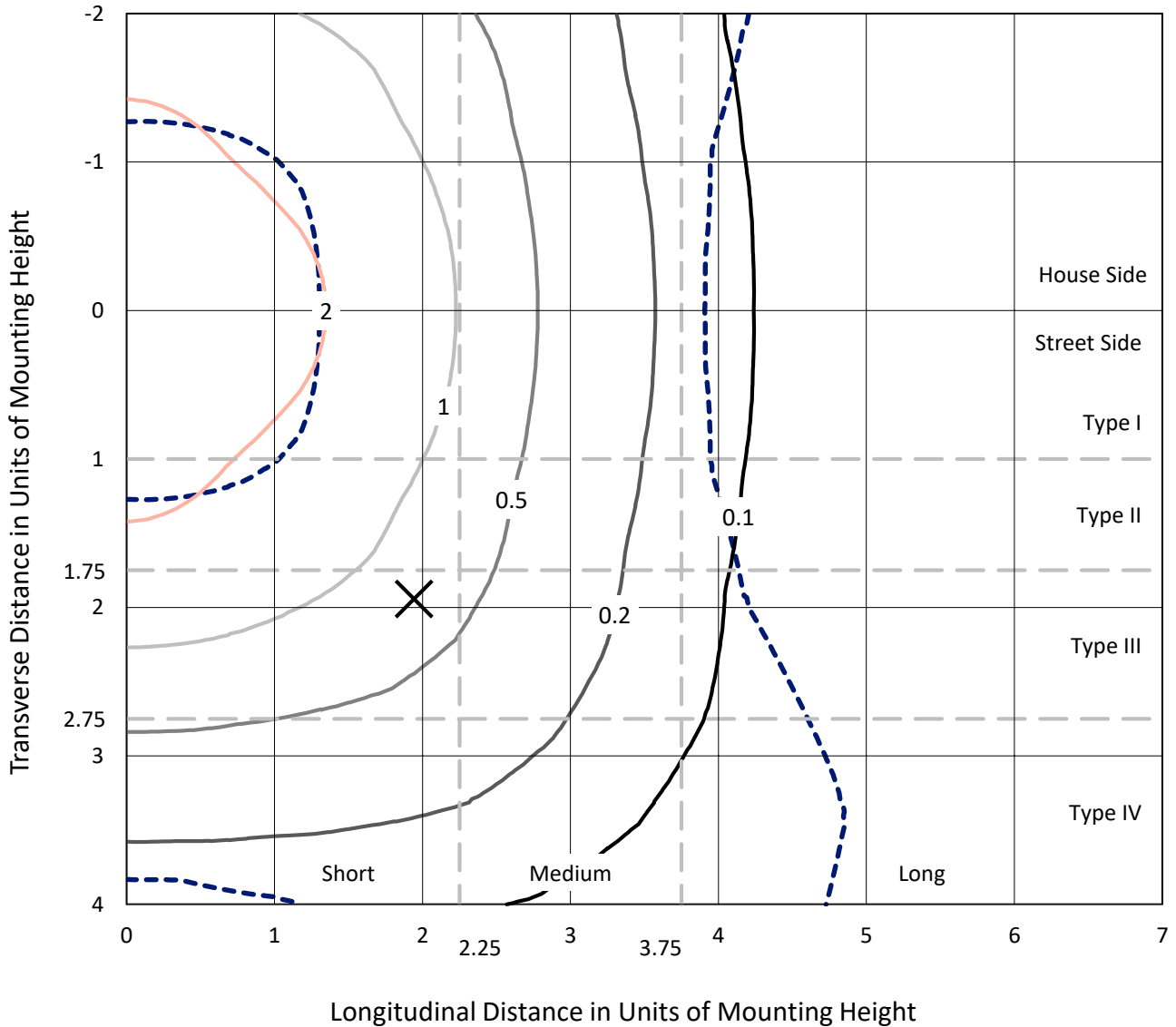
Input Watts (W): 308  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

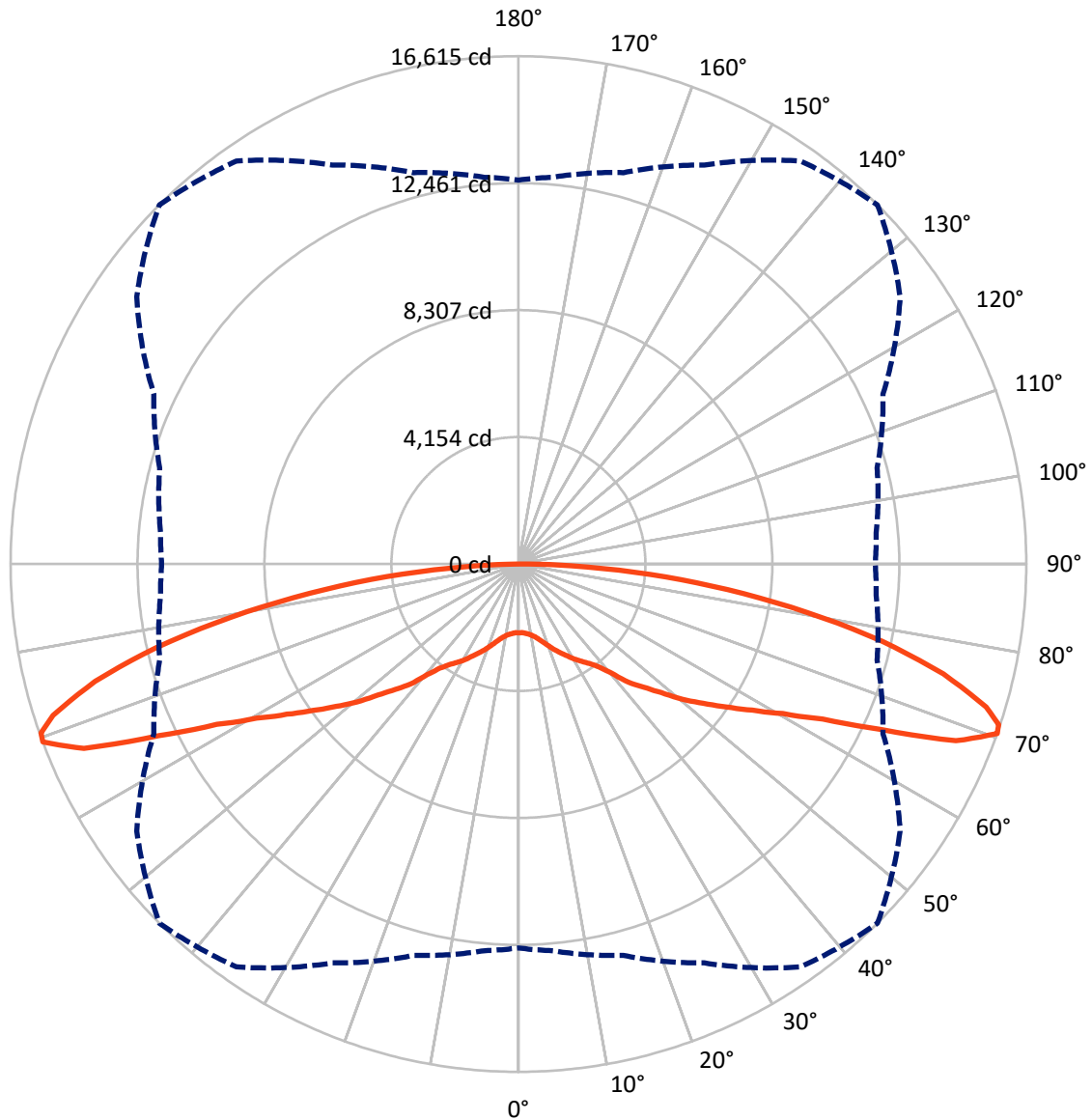
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.7 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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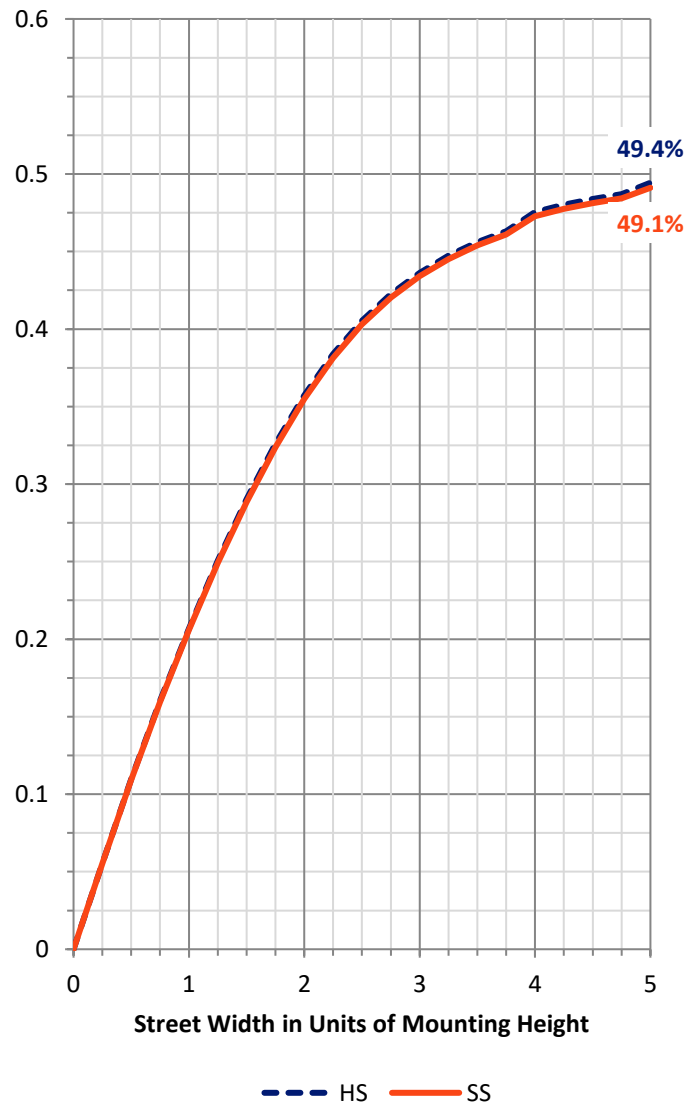
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	22145.5	0.0	22145.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	22145.5	0.0	22145.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	44291.0	0.0	44291.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.7	0.5
10°-20°	734.4	1.7
20°-30°	1467.6	3.3
30°-40°	2523.9	5.7
40°-50°	4669.0	10.5
50°-60°	7936.0	17.9
60°-70°	12791.8	28.9
70°-80°	11305.8	25.5
80°-90°	2641.8	6.0
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°-90°	44291.0	100.0
0°-180°	44291.0	100.0



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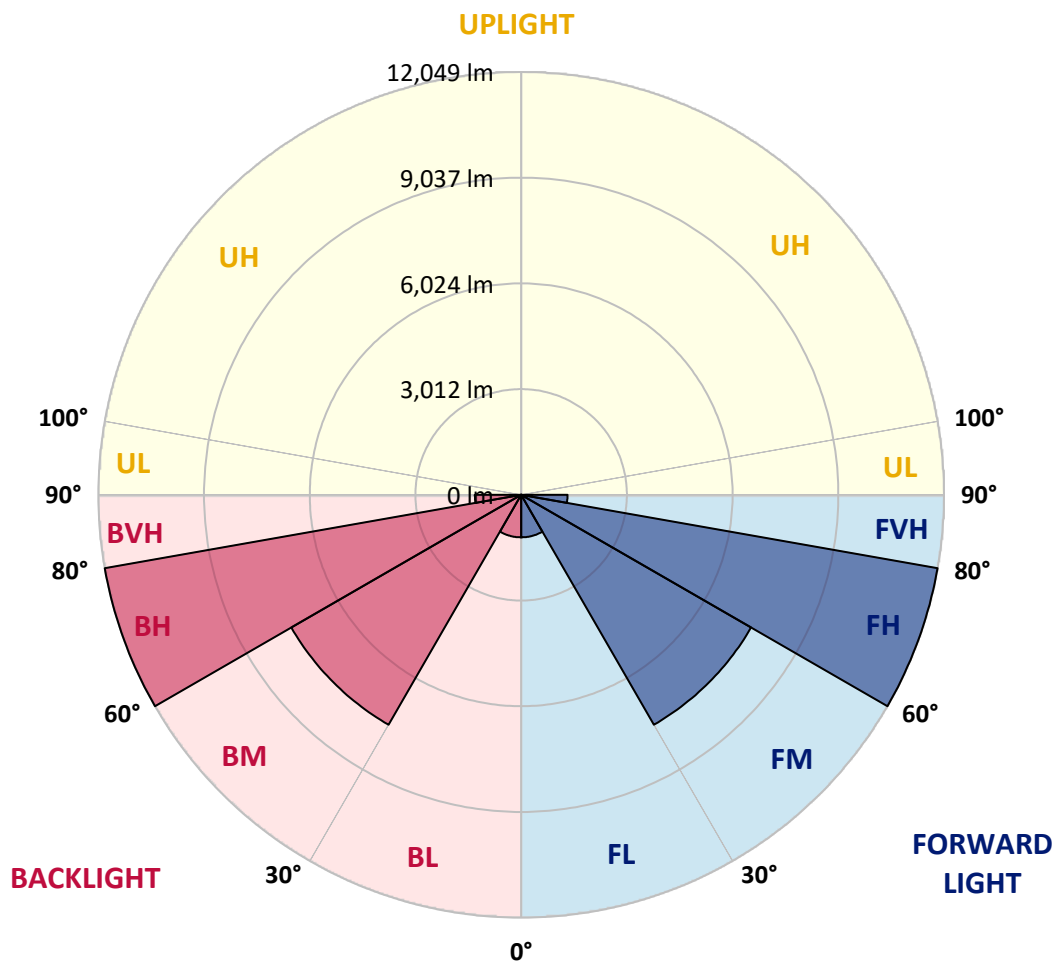
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1211.4	2.7			
FM	(30°-60°)	7564.4	17.1			
FH	(60°-80°)	12048.8	27.2			G5
FVH	(80°-90°)	1320.9	3.0			G5
BL	(0°-30°)	1211.4	2.7	B3/2500		
BM	(30°-60°)	7564.4	17.1	B4/8500		
BH	(60°-80°)	12048.8	27.2	B5		G5
BVH	(80°-90°)	1320.9	3.0			G5
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2250.3	2250.3	2250.3	2250.3	2250.3	2250.3	2250.3	2250.3	2250.3	2250.3	2250.3
2.5°	2269.8	2265.6	2267.0	2267.0	2242.0	2247.5	2248.9	2264.3	2264.3	2271.2	2272.6
5°	2292.1	2285.2	2286.5	2292.1	2268.4	2272.6	2272.6	2287.9	2285.2	2293.5	2297.7
7.5°	2331.1	2325.6	2325.6	2331.1	2303.3	2310.2	2306.1	2320.0	2314.4	2318.6	2327.0
10°	2393.8	2392.4	2388.3	2391.1	2360.4	2364.6	2356.2	2371.5	2360.4	2361.8	2377.1
12.5°	2466.3	2464.9	2464.9	2469.1	2442.6	2449.6	2435.6	2441.2	2421.7	2424.5	2437.0
15°	2555.5	2558.3	2561.0	2573.6	2556.9	2563.8	2542.9	2540.1	2517.8	2517.8	2533.2
17.5°	2678.1	2678.1	2679.5	2707.3	2697.6	2708.7	2679.5	2660.0	2637.7	2640.5	2643.3
20°	2831.4	2825.8	2828.6	2862.0	2864.8	2873.2	2827.2	2800.7	2777.0	2778.4	2775.6
22.5°	2994.4	2983.2	2981.8	3027.8	3047.3	3050.1	2986.0	2960.9	2930.3	2934.5	2931.7
25°	3150.4	3139.3	3133.7	3171.3	3222.9	3220.1	3150.4	3114.2	3100.3	3100.3	3103.1
27.5°	3305.1	3291.2	3285.6	3307.9	3388.7	3402.6	3310.7	3278.6	3264.7	3277.2	3282.8
30°	3461.2	3450.0	3447.2	3454.2	3546.2	3607.5	3465.4	3451.4	3450.0	3461.2	3473.7
32.5°	3650.7	3649.3	3638.1	3636.7	3705.0	3794.2	3650.7	3659.0	3681.3	3706.4	3723.1
35°	3894.5	3891.7	3861.1	3875.0	3908.4	3992.1	3909.8	3915.4	3975.3	4013.0	4033.9
37.5°	4219.2	4198.3	4159.3	4160.7	4177.4	4262.4	4230.3	4273.5	4382.2	4451.9	4444.9
40°	4679.0	4645.5	4587.0	4570.3	4567.5	4688.7	4719.4	4816.9	4988.3	5091.4	5084.5
42.5°	5336.7	5301.8	5212.7	5189.0	5198.7	5293.5	5382.7	5537.3	5686.4	5806.2	5799.3
45°	6011.1	5966.5	5823.0	5742.1	5672.5	5744.9	5884.3	6126.7	6305.1	6462.5	6459.7
47.5°	6791.4	6721.7	6548.9	6394.2	6254.9	6281.4	6430.5	6707.8	6923.7	7081.2	7071.4
50°	7638.5	7568.9	7379.4	7146.7	6930.7	6948.8	7021.3	7313.9	7528.5	7681.7	7684.5
52.5°	8544.2	8494.1	8276.7	7968.8	7672.0	7570.3	7616.2	7886.6	8133.2	8278.1	8290.6
55°	9521.0	9472.2	9243.7	8888.4	8481.5	8253.0	8251.6	8523.3	8772.8	8899.6	8919.1
57.5°	10500.6	10474.1	10273.4	9886.1	9373.3	9023.6	8944.1	9227.0	9507.1	9638.1	9664.5
60°	11509.4	11473.1	11305.9	10981.3	10418.3	9939.0	9805.3	10088.1	10404.4	10539.6	10556.3
62.5°	12651.9	12615.7	12487.5	12144.8	11729.5	11175.0	10981.3	11241.8	11534.5	11750.4	11728.1
65°	13794.5	13786.2	13840.5	13685.8	13368.1	13050.5	12668.7	12954.3	13170.3	13149.4	13142.4
67.5°	13612.0	13664.9	14041.2	14577.6	15247.8	15437.3	14555.3	13755.5	13284.5	13011.4	12925.1
70°	12561.4	12697.9	13255.3	14399.3	16089.4	16614.7	15243.6	13159.1	12147.5	11749.0	11672.4
71°	11981.7	12089.0	12731.4	14128.9	16095.0	16568.8	15080.6	12710.5	11682.2	11135.9	11083.0
72.5°	10853.1	11018.9	11728.1	13389.0	15605.9	16004.4	14370.0	11874.4	10797.3	10265.1	10235.8
75°	8676.6	8726.8	9642.2	11528.9	14052.3	14368.6	12756.5	10304.1	9193.6	8829.9	8809.0
77.5°	6123.9	6125.3	7003.2	8987.3	11650.1	12162.9	11048.2	8495.5	7373.8	6916.8	6815.1
80°	3243.8	3376.2	4247.0	6176.9	8726.8	9571.2	8779.7	6423.5	5184.8	4517.4	4424.0
82.5°	1478.4	1573.1	2137.5	3501.6	5739.4	6893.1	6023.6	4170.4	2778.4	2058.0	1998.1
85°	574.1	588.0	882.0	1663.7	3209.0	4323.7	3507.2	1954.9	967.0	590.8	547.6
87.5°	188.1	200.6	287.0	641.0	1365.5	1726.4	1355.8	588.0	188.1	117.0	112.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)