

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: P247414

Luminaire Tested: **LSR8B80D010 EC8B80940 8LBW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247414
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13927)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B80940 8LBW0WH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7750.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.12
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

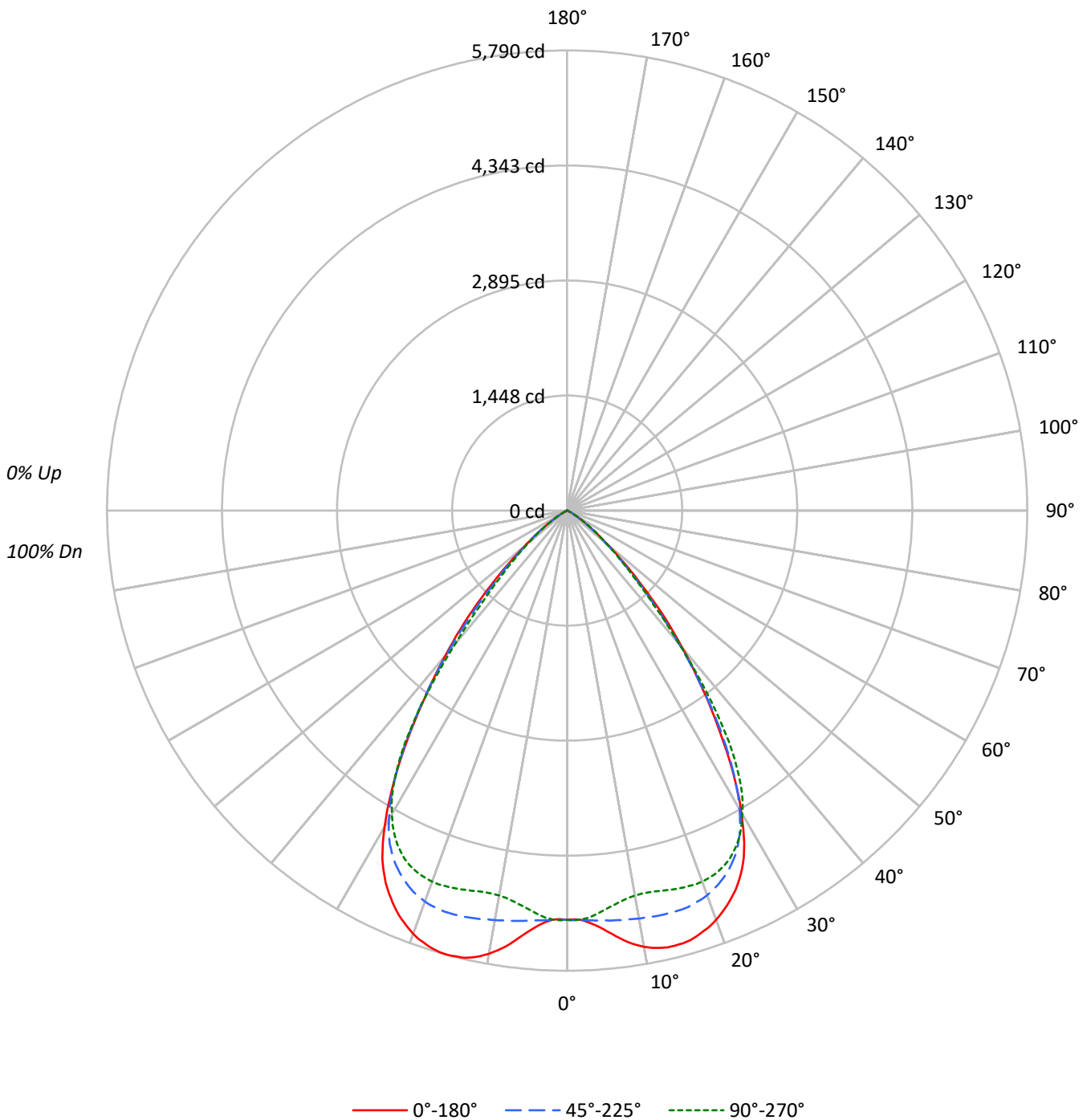
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P247414

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P247414

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBW0WH

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 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 113 | 110 | 107 | 105 | 110 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | | | | | 92 | | | | |
| 2 | 106 | 101 | 96 | 93 | 104 | 99 | 95 | 92 | 96 | 92 | 90 | 93 | 90 | 88 | 90 | 88 | 86 | | | | | 84 | | | | |
| 3 | 100 | 93 | 87 | 83 | 98 | 91 | 86 | 82 | 89 | 84 | 81 | 86 | 83 | 79 | 84 | 81 | 78 | | | | | 76 | | | | |
| 4 | 94 | 85 | 79 | 74 | 92 | 84 | 79 | 74 | 82 | 77 | 73 | 80 | 76 | 72 | 78 | 74 | 71 | | | | | 70 | | | | |
| 5 | 88 | 79 | 72 | 67 | 87 | 78 | 72 | 67 | 76 | 71 | 66 | 74 | 70 | 66 | 73 | 69 | 65 | | | | | 64 | | | | |
| 6 | 83 | 73 | 66 | 61 | 81 | 72 | 66 | 61 | 71 | 65 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | | | | | 58 | | | | |
| 7 | 78 | 68 | 61 | 56 | 77 | 67 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 63 | 59 | 55 | | | | | 53 | | | | |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 51 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | | | | | 49 | | | | |
| 9 | 70 | 59 | 52 | 48 | 68 | 58 | 52 | 48 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | | | | | 45 | | | | |
| 10 | 66 | 55 | 48 | 44 | 65 | 54 | 48 | 44 | 54 | 48 | 44 | 53 | 47 | 44 | 52 | 47 | 44 | | | | | 42 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 158850 | 158850 | 158850 |
| 5° | 163726 | 156612 | 163998 |
| 10° | 174527 | 153971 | 177267 |
| 15° | 179896 | 157750 | 184853 |
| 20° | 179890 | 163017 | 185994 |
| 25° | 174380 | 164551 | 180637 |
| 30° | 156078 | 157011 | 163556 |
| 35° | 124312 | 133618 | 131231 |
| 40° | 90821 | 88357 | 96018 |
| 45° | 58022 | 51725 | 63081 |
| 50° | 31389 | 30760 | 33701 |
| 55° | 16118 | 16709 | 16118 |
| 60° | 7018 | 7018 | 5125 |
| 65° | 1437 | 1919 | 1598 |
| 70° | 983 | 1379 | 1578 |
| 75° | 0 | 786 | 0 |
| 80° | 391 | 391 | 1545 |
| 85° | 0 | 778 | 0 |



TEST NUMBER: P247414

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBW0WH

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 496.5 | 6.4 |
| 10°-20° | 1493.9 | 19.3 |
| 20°-30° | 2273.8 | 29.3 |
| 30°-40° | 2116.1 | 27.3 |
| 40°-50° | 1029.9 | 13.3 |
| 50°-60° | 293.5 | 3.8 |
| 60°-70° | 38.4 | 0.5 |
| 70°-80° | 6.1 | 0.1 |
| 80°-90° | 1.9 | 0.0 |
| 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°-30° | 4264.3 | 55.0 |
| 0°-40° | 6380.4 | 82.3 |
| 0°-60° | 7703.8 | 99.4 |
| 0°-90° | 7750.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 7750.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 5151 | 5151 | 5151 | 5151 | 5151 | |
| 5° | 5289 | 5173 | 5060 | 5178 | 5298 | 515 |
| 15° | 5635 | 5226 | 4941 | 5276 | 5790 | 1585 |
| 25° | 5125 | 4902 | 4836 | 5009 | 5309 | 2326 |
| 35° | 3302 | 3348 | 3550 | 3512 | 3486 | 2053 |
| 45° | 1330 | 1232 | 1186 | 1328 | 1446 | 1052 |
| 55° | 300 | 300 | 311 | 304 | 300 | 294 |
| 65° | 20 | 24 | 26 | 24 | 22 | 38 |
| 75° | 0 | 2 | 7 | 2 | 0 | 4 |
| 85° | 0 | 2 | 2 | 4 | 0 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247414

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBW0WH

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5151.4 | 5151.4 | 5151.4 | 5151.4 | 5151.4 | 5151.4 | 5151.4 | 5151.4 | 5151.4 |
| 1° | 5144.8 | 5151.4 | 5155.8 | 5153.7 | 5155.8 | 5153.7 | 5149.3 | 5140.5 | 5140.5 |
| 2° | 5153.7 | 5162.4 | 5160.2 | 5155.8 | 5149.3 | 5149.3 | 5162.4 | 5144.8 | 5149.3 |
| 3° | 5188.6 | 5188.6 | 5162.4 | 5138.4 | 5129.5 | 5138.4 | 5160.2 | 5173.3 | 5184.3 |
| 4° | 5232.4 | 5223.7 | 5171.2 | 5116.5 | 5098.9 | 5120.8 | 5169.0 | 5210.5 | 5232.4 |
| 5° | 5289.3 | 5263.0 | 5173.3 | 5090.2 | 5059.5 | 5092.3 | 5177.7 | 5256.5 | 5298.1 |
| 6° | 5355.0 | 5315.5 | 5186.5 | 5061.7 | 5022.3 | 5068.3 | 5190.9 | 5311.2 | 5374.6 |
| 7° | 5420.7 | 5357.2 | 5193.0 | 5039.8 | 4989.5 | 5053.0 | 5201.8 | 5372.5 | 5455.6 |
| 8° | 5481.9 | 5396.5 | 5199.6 | 5020.2 | 4958.8 | 5024.5 | 5210.5 | 5427.1 | 5536.6 |
| 9° | 5532.3 | 5433.7 | 5203.9 | 5004.9 | 4932.6 | 5007.0 | 5221.5 | 5475.3 | 5604.4 |
| 10° | 5573.8 | 5462.2 | 5212.8 | 4996.0 | 4917.3 | 4998.3 | 5232.4 | 5517.0 | 5661.3 |
| 11° | 5606.7 | 5481.9 | 5214.9 | 4991.7 | 4910.7 | 4991.7 | 5241.1 | 5558.5 | 5709.5 |
| 12° | 5626.3 | 5499.4 | 5221.5 | 4993.9 | 4912.9 | 4998.3 | 5254.3 | 5576.0 | 5748.9 |
| 13° | 5639.5 | 5506.0 | 5225.8 | 5000.5 | 4917.3 | 5002.6 | 5263.0 | 5591.4 | 5775.1 |
| 14° | 5639.5 | 5501.6 | 5225.8 | 5007.0 | 4930.5 | 5011.4 | 5269.6 | 5602.3 | 5781.7 |
| 15° | 5635.1 | 5499.4 | 5225.8 | 5017.9 | 4941.4 | 5020.2 | 5276.2 | 5608.8 | 5790.4 |
| 16° | 5622.0 | 5486.2 | 5223.7 | 5024.5 | 4952.3 | 5028.9 | 5278.3 | 5604.4 | 5783.9 |
| 17° | 5595.7 | 5479.8 | 5214.9 | 5031.1 | 4963.3 | 5037.7 | 5278.3 | 5593.5 | 5768.5 |
| 18° | 5560.6 | 5433.7 | 5193.0 | 5024.5 | 4965.4 | 5035.5 | 5265.3 | 5565.1 | 5740.2 |
| 19° | 5530.0 | 5407.5 | 5177.7 | 5020.2 | 4974.2 | 5042.1 | 5256.5 | 5545.3 | 5709.5 |
| 20° | 5481.9 | 5363.7 | 5151.4 | 5007.0 | 4967.7 | 5028.9 | 5234.7 | 5510.4 | 5667.9 |
| 21° | 5422.8 | 5313.4 | 5114.2 | 4985.1 | 4956.7 | 5011.4 | 5203.9 | 5462.2 | 5611.0 |
| 22° | 5363.7 | 5256.5 | 5074.9 | 4963.3 | 4939.2 | 4996.0 | 5171.2 | 5411.8 | 5551.9 |
| 23° | 5293.7 | 5193.0 | 5024.5 | 4926.1 | 4912.9 | 4961.1 | 5125.2 | 5357.2 | 5481.9 |
| 24° | 5214.9 | 5118.6 | 4969.8 | 4884.4 | 4880.1 | 4923.9 | 5072.7 | 5284.9 | 5398.8 |
| 25° | 5125.2 | 5039.8 | 4902.0 | 4831.9 | 4836.3 | 4873.5 | 5009.2 | 5203.9 | 5309.1 |
| 26° | 5017.9 | 4939.2 | 4823.2 | 4768.5 | 4775.1 | 4812.3 | 4937.0 | 5109.9 | 5210.5 |
| 27° | 4897.6 | 4825.4 | 4731.3 | 4691.9 | 4709.4 | 4742.2 | 4849.5 | 5007.0 | 5088.0 |
| 28° | 4746.6 | 4689.7 | 4621.9 | 4604.4 | 4626.3 | 4663.5 | 4753.2 | 4882.3 | 4954.5 |
| 29° | 4571.5 | 4540.9 | 4488.4 | 4497.1 | 4527.7 | 4558.4 | 4632.8 | 4726.9 | 4783.8 |
| 30° | 4383.4 | 4370.2 | 4339.6 | 4374.6 | 4409.6 | 4435.9 | 4486.2 | 4549.6 | 4593.4 |
| 31° | 4190.8 | 4175.5 | 4179.8 | 4236.7 | 4289.2 | 4306.7 | 4335.2 | 4365.8 | 4398.7 |
| 32° | 3974.1 | 3969.7 | 3987.2 | 4070.4 | 4138.3 | 4147.0 | 4149.2 | 4157.9 | 4175.5 |
| 33° | 3753.1 | 3746.5 | 3781.6 | 3884.4 | 3961.0 | 3967.6 | 3950.0 | 3941.3 | 3954.4 |
| 34° | 3523.3 | 3523.3 | 3569.2 | 3676.5 | 3766.2 | 3772.7 | 3737.8 | 3733.4 | 3720.2 |
| 35° | 3302.3 | 3295.7 | 3348.2 | 3448.9 | 3549.5 | 3551.8 | 3512.3 | 3488.3 | 3486.1 |
| 37.5° | 2755.1 | 2744.2 | 2761.7 | 2814.2 | 2888.6 | 2928.1 | 2923.7 | 2914.9 | 2908.4 |
| 40° | 2256.2 | 2230.0 | 2195.0 | 2173.1 | 2195.0 | 2275.9 | 2345.9 | 2378.8 | 2385.3 |
| 42.5° | 1785.7 | 1748.5 | 1674.1 | 1612.8 | 1621.6 | 1696.0 | 1803.2 | 1877.6 | 1914.8 |
| 45° | 1330.5 | 1293.3 | 1232.1 | 1186.1 | 1186.1 | 1238.6 | 1328.3 | 1404.9 | 1446.5 |
| 47.5° | 949.8 | 925.7 | 890.7 | 870.9 | 884.1 | 906.0 | 956.3 | 1013.3 | 1030.7 |
| 50° | 654.3 | 647.7 | 628.1 | 628.1 | 641.2 | 658.7 | 667.5 | 695.9 | 702.5 |
| 52.5° | 457.4 | 446.4 | 448.6 | 450.8 | 461.7 | 464.0 | 477.0 | 470.5 | 481.5 |
| 55° | 299.8 | 299.8 | 299.8 | 306.3 | 310.8 | 310.8 | 304.2 | 299.8 | 299.8 |
| 57.5° | 190.4 | 186.0 | 188.2 | 192.6 | 192.6 | 186.0 | 175.1 | 172.9 | 162.0 |



TEST NUMBER: P247414

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBW0WH

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-------|-------|-------|-------|--------|------|--------|------|
| 60° | 113.8 | 113.8 | 116.0 | 116.0 | 113.8 | 107.2 | 96.3 | 87.6 | 83.1 |
| 62.5° | 59.1 | 61.3 | 61.3 | 72.2 | 61.3 | 54.7 | 50.4 | 39.4 | 37.2 |
| 65° | 19.7 | 24.1 | 24.1 | 24.1 | 26.3 | 24.1 | 24.1 | 21.9 | 21.9 |
| 67.5° | 13.2 | 15.3 | 15.3 | 17.5 | 17.5 | 17.5 | 17.5 | 21.9 | 15.3 |
| 70° | 10.9 | 10.9 | 13.2 | 15.3 | 15.3 | 17.5 | 13.2 | 10.9 | 17.5 |
| 72.5° | 6.6 | 8.7 | 6.6 | 10.9 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 |
| 75° | 0.0 | 4.4 | 2.2 | 0.0 | 6.6 | 4.4 | 2.2 | 4.4 | 0.0 |
| 77.5° | 2.2 | 2.2 | 2.2 | 2.2 | 4.4 | 4.4 | 4.4 | 4.4 | 2.2 |
| 80° | 2.2 | 2.2 | 4.4 | 2.2 | 2.2 | 4.4 | 0.0 | 0.0 | 8.7 |
| 82.5° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 0.0 | 2.2 | 2.2 |
| 85° | 0.0 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 4.4 | 4.4 | 0.0 |
| 87.5° | 0.0 | 2.2 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 4.4 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)