

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or  
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: H37024

Luminaire Tested: **H600T-1625P**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: H37024  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H600T-1625P  
Description: HALO RECESSED DOWNLIGHT  
BRIGHT DIPPED & ANODIZED REFLECTOR  
SPECULAR WALLWASH SCOOP - HIGH SOCKET SETTING  
Light Source: 150R40 150 WATTS 1900 LUMENS  
R40 FLOOD  
Ballast/Driver: -

**Summary**

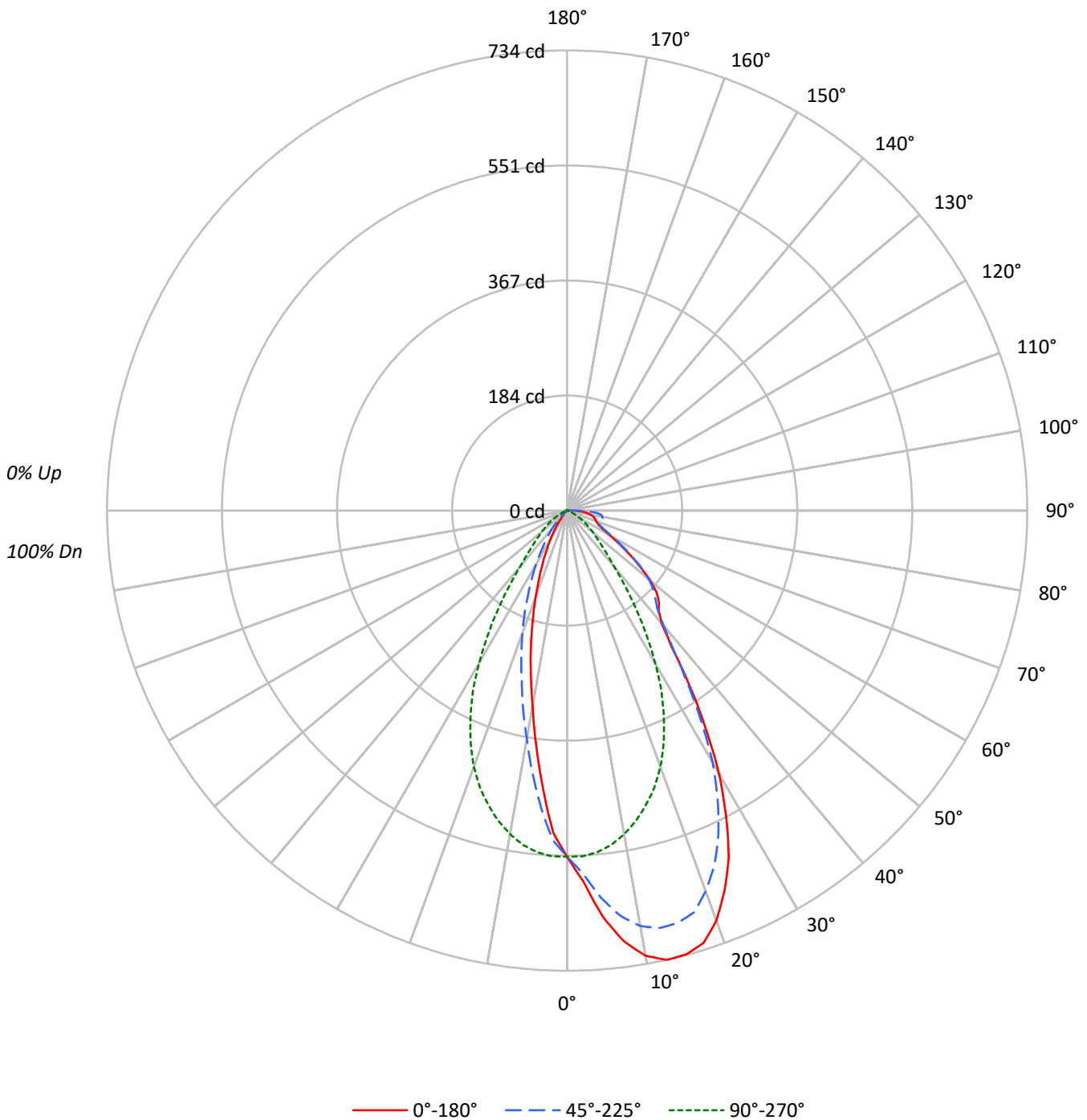
Lumens per Lamp: 1900 (1 lamp)  
Luminaire Lumens: 673.1 lumens  
Efficiency: 35.4%  
Efficacy: 4.5 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.92 / 0.92  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

Input Watts (W): 150  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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   | 42 | 42 | 42 | 42 | 41 | 41 | 41 | 41 | 39 | 39 | 39 | 38 | 38 | 38 | 36 | 36 | 36 | 35 |    |    |   |  |  |  |
| 1   | 39 | 38 | 37 | 36 | 38 | 37 | 36 | 35 | 36 | 35 | 34 | 34 | 33 | 33 | 33 | 32 | 32 | 31 |    |    |   |  |  |  |
| 2   | 37 | 34 | 32 | 31 | 36 | 34 | 32 | 30 | 32 | 31 | 30 | 31 | 30 | 29 | 30 | 29 | 28 | 28 |    |    |   |  |  |  |
| 3   | 34 | 31 | 29 | 27 | 33 | 31 | 29 | 27 | 30 | 28 | 26 | 29 | 27 | 26 | 28 | 27 | 26 | 25 |    |    |   |  |  |  |
| 4   | 32 | 29 | 26 | 24 | 31 | 28 | 26 | 24 | 27 | 25 | 24 | 27 | 25 | 23 | 26 | 24 | 23 | 23 |    |    |   |  |  |  |
| 5   | 30 | 26 | 24 | 22 | 29 | 26 | 24 | 22 | 25 | 23 | 22 | 25 | 23 | 21 | 24 | 22 | 21 | 20 |    |    |   |  |  |  |
| 6   | 28 | 24 | 22 | 20 | 28 | 24 | 22 | 20 | 23 | 21 | 20 | 23 | 21 | 20 | 22 | 21 | 19 | 19 |    |    |   |  |  |  |
| 7   | 27 | 23 | 20 | 18 | 26 | 22 | 20 | 18 | 22 | 20 | 18 | 21 | 19 | 18 | 21 | 19 | 18 | 17 |    |    |   |  |  |  |
| 8   | 25 | 21 | 19 | 17 | 25 | 21 | 18 | 17 | 20 | 18 | 17 | 20 | 18 | 17 | 20 | 18 | 17 | 16 |    |    |   |  |  |  |
| 9   | 24 | 20 | 17 | 16 | 23 | 20 | 17 | 16 | 19 | 17 | 16 | 19 | 17 | 15 | 18 | 17 | 15 | 15 |    |    |   |  |  |  |
| 10  | 23 | 19 | 16 | 15 | 22 | 18 | 16 | 15 | 18 | 16 | 14 | 18 | 16 | 14 | 17 | 16 | 14 | 14 |    |    |   |  |  |  |

**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 | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 51.4   | 7.6       | 2.7    |
| 10°-20°   | 134.5  | 20.0      | 7.1    |
| 20°-30°   | 163.0  | 24.2      | 8.6    |
| 30°-40°   | 122.7  | 18.2      | 6.5    |
| 40°-50°   | 80.8   | 12.0      | 4.3    |
| 50°-60°   | 52.7   | 7.8       | 2.8    |
| 60°-70°   | 27.2   | 4.0       | 1.4    |
| 70°-80°   | 23.1   | 3.4       | 1.2    |
| 80°-90°   | 17.0   | 2.5       | 0.9    |
| 90°-100°  | 0.7    | 0.1       | 0.0    |
| 100°-110° | 0.0    | 0.0       | 0.0    |
| 110°-120° | 0.0    | 0.0       | 0.0    |
| 120°-130° | 0.0    | 0.0       | 0.0    |
| 130°-140° | 0.0    | 0.0       | 0.0    |
| 140°-150° | 0.0    | 0.0       | 0.0    |
| 150°-160° | 0.0    | 0.0       | 0.0    |
| 160°-170° | 0.0    | 0.0       | 0.0    |
| 170°-180° | 0.0    | 0.0       | 0.0    |
| 0°-30°    | 348.9  | 51.8      | 18.4   |
| 0°-40°    | 471.6  | 70.1      | 24.8   |
| 0°-60°    | 605.1  | 89.9      | 31.8   |
| 0°-90°    | 672.3  | 99.9      | 35.4   |
| 90°-120°  | 0.7    | 0.1       | 0.0    |
| 90°-150°  | 0.7    | 0.1       | 0.0    |
| 90°-180°  | 1.0    | 0.1       | 0.1    |
| 0°-180°   | 673.1  | 100.0     | 35.4   |

**CANDELA DISTRIBUTION:**

|      | 0°  | 45° | 90° | 135° | 180° | Flux |
|------|-----|-----|-----|------|------|------|
| 0°   | 552 | 552 | 552 | 552  | 552  |      |
| 5°   | 650 | 620 | 547 | 476  | 444  | 64   |
| 15°  | 733 | 681 | 486 | 280  | 223  | 205  |
| 25°  | 610 | 571 | 365 | 147  | 92   | 275  |
| 35°  | 340 | 332 | 192 | 61   | 26   | 214  |
| 45°  | 207 | 199 | 76  | 19   | 6    | 158  |
| 55°  | 121 | 124 | 36  | 3    | 2    | 109  |
| 65°  | 56  | 59  | 10  | 0    | 0    | 58   |
| 75°  | 45  | 57  | 2   | 0    | 0    | 47   |
| 85°  | 28  | 49  | 1   | 1    | 1    | 24   |
| 90°  | 9   | 11  | 2   | 2    | 2    | 5    |
| 95°  | 0   | 0   | 0   | 0    | 0    | 0    |
| 105° | 0   | 0   | 0   | 0    | 0    | 0    |
| 115° | 0   | 0   | 0   | 0    | 0    | 0    |
| 125° | 0   | 0   | 0   | 0    | 0    | 0    |
| 135° | 0   | 0   | 0   | 0    | 0    | 0    |
| 145° | 0   | 0   | 0   | 0    | 0    | 0    |
| 155° | 0   | 0   | 0   | 0    | 0    | 0    |
| 165° | 0   | 0   | 0   | 0    | 0    | 0    |
| 175° | 0   | 0   | 0   | 0    | 0    | 0    |
| 180° | 0   | 0   | 0   | 0    | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°  | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-----|-------|-----|-------|-----|--------|------|--------|------|
| 0°     | 552 | 552   | 552 | 552   | 552 | 552    | 552  | 552    | 552  |
| 2.5°   | 592 | 587   | 579 | 568   | 552 | 538    | 526  | 516    | 514  |
| 5°     | 650 | 641   | 620 | 589   | 547 | 508    | 476  | 452    | 444  |
| 7.5°   | 693 | 683   | 652 | 603   | 538 | 474    | 423  | 388    | 378  |
| 10°    | 721 | 709   | 673 | 610   | 524 | 437    | 370  | 329    | 317  |
| 12.5°  | 734 | 722   | 682 | 612   | 507 | 399    | 324  | 281    | 267  |
| 15°    | 733 | 722   | 681 | 607   | 486 | 361    | 280  | 236    | 223  |
| 17.5°  | 723 | 714   | 672 | 596   | 463 | 325    | 243  | 197    | 182  |
| 20°    | 696 | 687   | 646 | 571   | 435 | 288    | 208  | 163    | 147  |
| 22.5°  | 656 | 651   | 613 | 541   | 402 | 254    | 177  | 132    | 116  |
| 25°    | 610 | 604   | 571 | 505   | 365 | 220    | 147  | 105    | 92   |
| 27.5°  | 549 | 549   | 520 | 462   | 326 | 188    | 122  | 81     | 70   |
| 30°    | 484 | 484   | 464 | 414   | 281 | 158    | 99   | 62     | 54   |
| 32.5°  | 410 | 415   | 398 | 358   | 236 | 131    | 78   | 47     | 39   |
| 35°    | 340 | 344   | 332 | 300   | 192 | 108    | 61   | 34     | 26   |
| 37.5°  | 272 | 283   | 277 | 251   | 151 | 87     | 48   | 23     | 16   |
| 40°    | 234 | 238   | 238 | 214   | 117 | 69     | 36   | 14     | 10   |
| 42.5°  | 216 | 218   | 213 | 189   | 93  | 55     | 26   | 9      | 9    |
| 45°    | 207 | 208   | 199 | 173   | 76  | 43     | 19   | 8      | 6    |
| 47.5°  | 194 | 196   | 186 | 157   | 63  | 34     | 13   | 5      | 5    |
| 50°    | 172 | 177   | 170 | 140   | 53  | 26     | 8    | 4      | 3    |
| 52.5°  | 146 | 151   | 148 | 121   | 44  | 19     | 4    | 3      | 3    |
| 55°    | 121 | 125   | 124 | 102   | 36  | 14     | 3    | 2      | 2    |
| 57.5°  | 97  | 101   | 102 | 85    | 29  | 9      | 2    | 1      | 1    |
| 60°    | 78  | 82    | 83  | 69    | 21  | 5      | 1    | 1      | 1    |
| 62.5°  | 64  | 68    | 69  | 57    | 15  | 3      | 1    | 1      | 1    |
| 65°    | 56  | 58    | 59  | 50    | 10  | 1      | 0    | 0      | 0    |
| 67.5°  | 52  | 54    | 55  | 45    | 6   | 0      | 0    | 0      | 0    |
| 70°    | 49  | 52    | 55  | 43    | 4   | 1      | 0    | 0      | 0    |
| 72.5°  | 47  | 51    | 55  | 42    | 3   | 1      | 0    | 0      | 0    |
| 75°    | 45  | 50    | 57  | 43    | 2   | 1      | 0    | 0      | 0    |
| 77.5°  | 42  | 48    | 58  | 43    | 1   | 1      | 1    | 1      | 1    |
| 80°    | 38  | 45    | 57  | 42    | 1   | 1      | 1    | 1      | 1    |
| 82.5°  | 34  | 41    | 55  | 40    | 0   | 1      | 1    | 1      | 1    |
| 85°    | 28  | 36    | 49  | 35    | 1   | 1      | 1    | 1      | 1    |
| 87.5°  | 18  | 25    | 35  | 25    | 1   | 1      | 1    | 1      | 1    |
| 90°    | 9   | 10    | 11  | 8     | 2   | 1      | 2    | 2      | 2    |
| 92.5°  | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 95°    | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 97.5°  | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 100°   | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 102.5° | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 105°   | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 107.5° | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 110°   | 0   | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |



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**CANDELA DISTRIBUTION (continued):**

|        | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|----|-------|-----|-------|-----|--------|------|--------|------|
| 112.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 115°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 117.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 120°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 122.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 125°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 127.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 130°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 132.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 135°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 137.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 140°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 142.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 145°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 147.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 150°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 152.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 155°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 157.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 160°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 162.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 165°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 167.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 170°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 172.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 175°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 177.5° | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |
| 180°   | 0  | 0     | 0   | 0     | 0   | 0      | 0    | 0      | 0    |

(END OF REPORT)