

## PHOTOMETRIC RESULTS

<b>Name:</b>	<b>TTP 70 LINE L1460 TOP 830 END LO</b>		
<b>Number:</b>	90488L150-50	<b>Diameter:</b>	0 mm
<b>Report:</b>	07-01-2020	<b>Length:</b>	1460 mm
<b>Meas.-no.:</b>	01	<b>Width:</b>	70 mm
<b>Lamp type:</b>	LED 830 - 01	<b>Height:</b>	70 mm
<b>Number:</b>	1	<b>Power:</b>	28,24 W
<b>Lamp flux:</b>	4300,00 lm	<b>Operator:</b>	INDEL AGUE GROUP
<b>Date:</b>	07-01-2020 15:36:45	<b>Output ratio:</b>	86,4 %

## Protocol

**LiTG-class:** A31  
**UTE-class:** 0,78 G + 0,09 T  
**IES-class:** 42 - 71 - 90 - 90 - 86  
**TM5-class:** BZ5

<b>Divergences in the plane through maximum intensity:</b>	Horizontal	Vertical
<b>One half peak divergence</b>	102,9°	130,1°
<b>Half peak side angle (left)</b>	-51,4°	-65,1°
<b>Half peak side angle (right)</b>	51,4°	65,1°
<b>One tenth peak divergence</b>	157,1°	230,1°
<b>Tenth peak side angle (left)</b>	-78,6°	-115,1°
<b>Tenth peak side angle (right)</b>	78,6°	115,1°

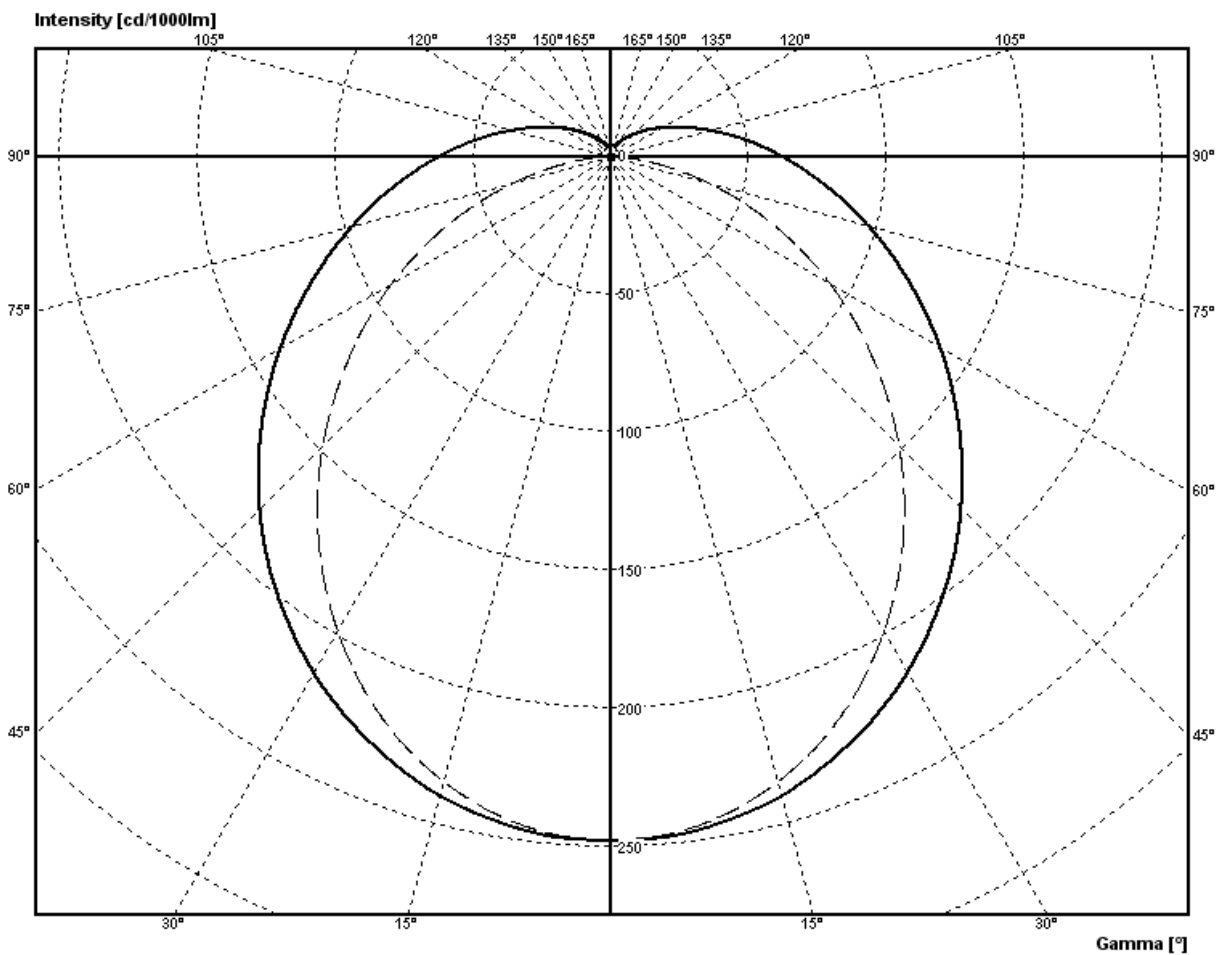
<b>C-planes:</b>	0,0°	15,0°	30,0°	45,0°	60,0°	75,0°	90,0°	105,0°	120,0°	135,0°
	150,0°	165,0°	180,0°	195,0°	210,0°	225,0°	240,0°	255,0°	270,0°	285,0°
	300,0°	315,0°	330,0°	345,0°						

<b>Gamma:</b>	0,0°	5,0°	10,0°	15,0°	20,0°	25,0°	30,0°	35,0°	40,0°	45,0°
	50,0°	55,0°	60,0°	65,0°	70,0°	75,0°	80,0°	85,0°	90,0°	95,0°
	100,0°	105,0°	110,0°	115,0°	120,0°	125,0°	130,0°	135,0°	140,0°	145,0°
	150,0°	155,0°	160,0°	165,0°	170,0°	175,0°	180,0°			

## PHOTOMETRIC RESULTS

Name:	TTP 70 LINE L1460 TOP 830 END LO		
Number:	90488L150-50	Diameter:	0 mm
Report:	07-01-2020	Length:	1460 mm
Meas.-no.:	01	Width:	70 mm
Lamp type:	LED 830 - 01	Height:	70 mm
Number:	1	Power:	28,24 W
Lamp flux:	4300,00 lm	Operator:	INDELAGUE GROUP
Date:	07-01-2020 15:36:45	Output ratio:	86,4 %

Polar diagram TTP 70 LINE L1460 TOP 830 END LO / Total in 15° C / 5° G



## PHOTOMETRIC RESULTS

<b>Name:</b>	<b>TTP 70 LINE L1460 TOP 830 END LO</b>		
<b>Number:</b>	90488L150-50	<b>Diameter:</b>	0 mm
<b>Report:</b>	07-01-2020	<b>Length:</b>	1460 mm
<b>Meas.-no.:</b>	01	<b>Width:</b>	70 mm
<b>Lamp type:</b>	LED 830 - 01	<b>Height:</b>	70 mm
<b>Number:</b>	1	<b>Power:</b>	28,24 W
<b>Lamp flux:</b>	4300,00 lm	<b>Operator:</b>	INDEL AGUE GROUP
<b>Date:</b>	07-01-2020 15:36:45	<b>Output ratio:</b>	86,4 %

## UGR Unified Glare Ratios

<b>Ceiling reflectance</b>		<b>0,7</b>	<b>0,7</b>	<b>0,5</b>	<b>0,5</b>	<b>0,3</b>	<b>0,7</b>	<b>0,7</b>	<b>0,5</b>	<b>0,5</b>	<b>0,3</b>
<b>Wall reflectance</b>		<b>0,5</b>	<b>0,3</b>	<b>0,5</b>	<b>0,3</b>	<b>0,3</b>	<b>0,5</b>	<b>0,3</b>	<b>0,5</b>	<b>0,3</b>	<b>0,3</b>
<b>Floor cavity reflectance</b>		<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>	<b>0,2</b>
<b>Room dimension</b>		Viewed crosswise					Viewed endwise				
<b>2H</b>	<b>2H</b>	17,2	18,7	17,7	19,2	19,7	17,1	18,6	17,6	19,1	19,6
<b>2H</b>	<b>3H</b>	19,0	20,3	19,5	20,8	21,4	18,5	19,8	19,0	20,3	20,9
<b>2H</b>	<b>4H</b>	19,8	21,1	20,3	21,6	22,2	19,0	20,3	19,5	20,8	21,4
<b>2H</b>	<b>6H</b>	20,6	21,8	21,2	22,4	23,0	19,4	20,6	19,9	21,1	21,7
<b>2H</b>	<b>8H</b>	21,0	22,1	21,5	22,7	23,3	19,4	20,6	20,0	21,2	21,8
<b>2H</b>	<b>12H</b>	21,3	22,4	21,9	23,0	23,6	19,5	20,6	20,0	21,2	21,8
<b>4H</b>	<b>2H</b>	17,8	19,1	18,3	19,6	20,2	17,7	19,0	18,3	19,5	20,1
<b>4H</b>	<b>3H</b>	19,8	20,9	20,3	21,5	22,1	19,3	20,4	19,8	20,9	21,6
<b>4H</b>	<b>4H</b>	20,8	21,8	21,4	22,4	23,1	19,9	21,0	20,5	21,5	22,2
<b>4H</b>	<b>6H</b>	21,8	22,7	22,4	23,3	24,0	20,4	21,3	21,0	21,9	22,6
<b>4H</b>	<b>8H</b>	22,2	23,1	22,9	23,7	24,4	20,5	21,4	21,1	22,0	22,7
<b>4H</b>	<b>12H</b>	22,7	23,5	23,3	24,1	24,8	20,6	21,4	21,3	22,0	22,7
<b>8H</b>	<b>4H</b>	21,1	22,0	21,7	22,6	23,2	20,3	21,2	20,9	21,8	22,5
<b>8H</b>	<b>6H</b>	22,3	23,0	22,9	23,6	24,3	20,9	21,7	21,6	22,3	23,0
<b>8H</b>	<b>8H</b>	22,9	23,6	23,6	24,2	24,9	21,3	21,9	21,9	22,6	23,2
<b>8H</b>	<b>12H</b>	23,5	24,1	24,2	24,7	25,5	21,4	22,0	22,1	22,6	23,3
<b>12H</b>	<b>4H</b>	21,1	21,9	21,8	22,5	23,3	20,4	21,2	21,0	21,8	22,5
<b>12H</b>	<b>6H</b>	22,4	23,0	23,0	23,7	24,4	21,2	21,8	21,8	22,5	23,2
<b>12H</b>	<b>8H</b>	23,1	23,6	23,7	24,3	25,0	21,5	22,0	22,1	22,7	23,4

UGR values are corrected for lamp flux of 4300 lm by 5,1

## PHOTOMETRIC RESULTS

<b>Name:</b>	<b>TTP 70 LINE L1460 TOP 830 END LO</b>		
<b>Number:</b>	90488L150-50	<b>Diameter:</b>	0 mm
<b>Report:</b>	07-01-2020	<b>Length:</b>	1460 mm
<b>Meas.-no.:</b>	01	<b>Width:</b>	70 mm
<b>Lamp type:</b>	LED 830 - 01	<b>Height:</b>	70 mm
<b>Number:</b>	1	<b>Power:</b>	28,24 W
<b>Lamp flux:</b>	4300,00 lm	<b>Operator:</b>	INDEL AGUE GROUP
<b>Date:</b>	07-01-2020 15:36:45	<b>Output ratio:</b>	86,4 %

Luminance [cd/m<sup>2</sup>] TTP 70 LINE L1460 TOP 830 END LO / Total in 15° C / 5° G

G/C [cd/	0,00	15,00	30,00	45,00	60,00	75,00	90,00	105,00	120,00
45,00	5377,58	5364,52	5435,28	5624,29	6031,15	6855,55	8428,21	6855,55	6031,15
50,00	4991,04	4969,17	5014,13	5164,24	5528,56	6351,54	8027,97	6351,54	5528,56
55,00	4622,33	4592,91	4611,75	4723,39	5032,07	5811,47	7622,89	5811,47	5032,07
60,00	4275,46	4233,49	4237,66	4297,65	4540,88	5233,10	7149,00	5233,10	4540,88
65,00	3942,82	3902,13	3878,72	3897,22	4056,53	4639,06	6581,91	4639,06	4056,53
70,00	3632,65	3584,40	3544,01	3519,20	3585,92	3980,57	5884,04	3980,57	3585,92
75,00	3344,43	3291,34	3234,90	3166,80	3133,06	3281,34	4997,38	3281,34	3133,06
80,00	3081,74	3022,57	2956,26	2845,94	2715,03	2579,92	3849,59	2579,92	2715,03
85,00	2841,18	2783,97	2702,26	2562,65	2335,72	1949,05	2383,33	1949,05	2335,72

G/C [cd/	135,00	150,00	165,00	180,00	195,00	210,00	225,00	240,00	255,00
45,00	5624,29	5435,28	5364,52	5377,58	5364,52	5435,28	5624,29	6031,15	6855,55
50,00	5164,24	5014,13	4969,17	4991,04	4969,17	5014,13	5164,24	5528,56	6351,54
55,00	4723,39	4611,75	4592,91	4622,33	4592,91	4611,75	4723,39	5032,07	5811,47
60,00	4297,65	4237,66	4233,49	4275,46	4233,49	4237,66	4297,65	4540,88	5233,10
65,00	3897,22	3878,72	3902,13	3942,82	3902,13	3878,72	3897,22	4056,53	4639,06
70,00	3519,20	3544,01	3584,40	3632,65	3584,40	3544,01	3519,20	3585,92	3980,57
75,00	3166,80	3234,90	3291,34	3344,43	3291,34	3234,90	3166,80	3133,06	3281,34
80,00	2845,94	2956,26	3022,57	3081,74	3022,57	2956,26	2845,94	2715,03	2579,92
85,00	2562,65	2702,26	2783,97	2841,18	2783,97	2702,26	2562,65	2335,72	1949,05

G/C [cd/	270,00	285,00	300,00	315,00	330,00	345,00
45,00	8428,21	6855,55	6031,15	5624,29	5435,28	5364,52
50,00	8027,97	6351,54	5528,56	5164,24	5014,13	4969,17
55,00	7622,89	5811,47	5032,07	4723,39	4611,75	4592,91
60,00	7149,00	5233,10	4540,88	4297,65	4237,66	4233,49
65,00	6581,91	4639,06	4056,53	3897,22	3878,72	3902,13
70,00	5884,04	3980,57	3585,92	3519,20	3544,01	3584,40
75,00	4997,38	3281,34	3133,06	3166,80	3234,90	3291,34
80,00	3849,59	2579,92	2715,03	2845,94	2956,26	3022,57
85,00	2383,33	1949,05	2335,72	2562,65	2702,26	2783,97

## HEADQUARTERS

INDÚSTRIA ELÉTRICA DE ÁGUEDA S.A.

Rua da Mina 465 | Covão | Zona industrial EN1 Norte

3750-792 Trofa ÁGUEDA | PORTUGAL

www.indelague.com | www.roxolighting.com

indelague@indelague.pt | roxo.london@roxolighting.com

Tel. (+351) 234 612 310

Fax (+351) 234 624 058