

## PHOTOMETRIC RESULTS

<b>Name:</b>	<b>TTP 70 LINE L1180 TUP 840 SRT/MID LO</b>		
<b>Number:</b>	90489L120-58	<b>Diameter:</b>	0 mm
<b>Report:</b>	09-01-2020	<b>Length:</b>	1180 mm
<b>Meas.-no.:</b>	01	<b>Width:</b>	70 mm
<b>Lamp type:</b>	LED 840 - 01	<b>Height:</b>	70 mm
<b>Number:</b>	1	<b>Power:</b>	22,99 W
<b>Lamp flux:</b>	3800,00 lm	<b>Operator:</b>	INDEL AGUE GROUP
<b>Date:</b>	09-01-2020 18:28:42	<b>Output ratio:</b>	90,5 %

## Protocol

**LiTG-class:** A42  
**UTE-class:** 0,88 E + 0,03 T  
**IES-class:** 48 - 80 - 96 - 97 - 90  
**TM5-class:** BZ4

<b>Divergences in the plane through maximum intensity:</b>	Horizontal	Vertical
<b>One half peak divergence</b>	110,1°	114,0°
<b>Half peak side angle (left)</b>	-55,1°	-57,0°
<b>Half peak side angle (right)</b>	55,1°	57,0°
<b>One tenth peak divergence</b>	153,9°	162,4°
<b>Tenth peak side angle (left)</b>	-76,9°	-81,2°
<b>Tenth peak side angle (right)</b>	76,9°	81,2°

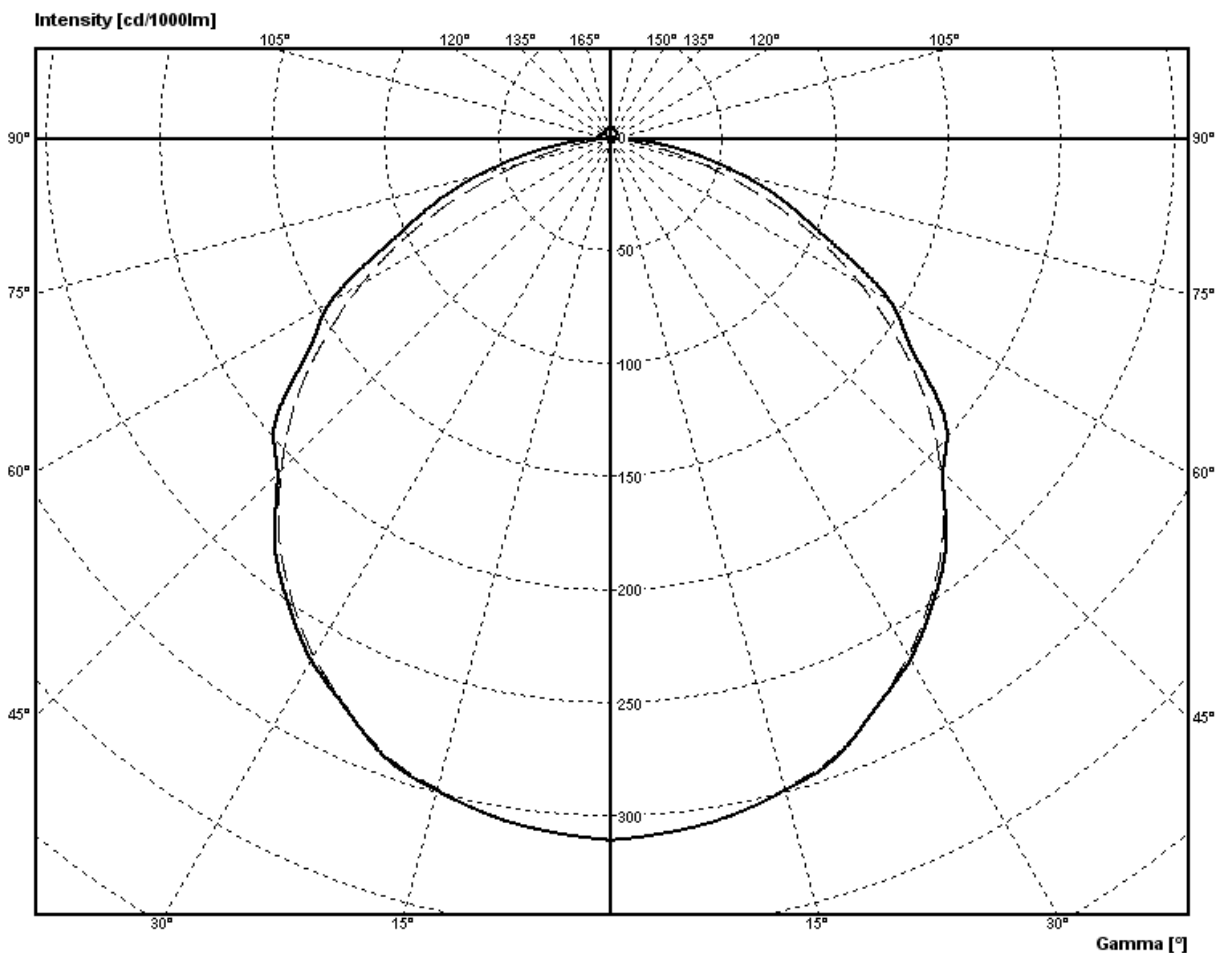
<b>C-planes:</b>	0,0°	15,0°	30,0°	45,0°	60,0°	75,0°	90,0°	105,0°	120,0°	135,0°
	150,0°	165,0°	180,0°	195,0°	210,0°	225,0°	240,0°	255,0°	270,0°	285,0°
	300,0°	315,0°	330,0°	345,0°						

<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°			

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Polar diagram TTP 70 LINE L1180 TUP 840 SRT/MID LO / Total in 15° C / 5° G



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## 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>	18,3	19,9	18,7	20,3	20,7	19,6	21,1	20,0	21,5	21,9
<b>2H</b>	<b>3H</b>	19,4	20,8	19,8	21,2	21,6	20,8	22,2	21,2	22,6	23,0
<b>2H</b>	<b>4H</b>	19,7	21,1	20,2	21,5	21,9	21,1	22,5	21,6	22,9	23,3
<b>2H</b>	<b>6H</b>	20,0	21,2	20,4	21,6	22,1	21,3	22,5	21,8	23,0	23,4
<b>2H</b>	<b>8H</b>	20,0	21,2	20,4	21,6	22,1	21,3	22,5	21,8	22,9	23,4
<b>2H</b>	<b>12H</b>	20,0	21,1	20,4	21,6	22,0	21,3	22,4	21,7	22,9	23,3
<b>4H</b>	<b>2H</b>	19,0	20,3	19,4	20,7	21,2	20,0	21,3	20,4	21,7	22,2
<b>4H</b>	<b>3H</b>	20,1	21,3	20,6	21,7	22,2	21,3	22,4	21,7	22,9	23,3
<b>4H</b>	<b>4H</b>	20,6	21,6	21,1	22,1	22,6	21,8	22,8	22,2	23,2	23,7
<b>4H</b>	<b>6H</b>	20,9	21,8	21,4	22,3	22,8	22,0	22,9	22,5	23,4	23,9
<b>4H</b>	<b>8H</b>	20,9	21,8	21,5	22,3	22,8	22,0	22,8	22,5	23,3	23,9
<b>4H</b>	<b>12H</b>	21,0	21,8	21,5	22,3	22,8	22,0	22,8	22,6	23,3	23,9
<b>8H</b>	<b>4H</b>	20,8	21,6	21,3	22,1	22,6	21,8	22,7	22,3	23,2	23,7
<b>8H</b>	<b>6H</b>	21,1	21,8	21,6	22,3	22,9	22,1	22,8	22,6	23,3	23,9
<b>8H</b>	<b>8H</b>	21,3	21,9	21,8	22,5	23,0	22,2	22,8	22,8	23,4	24,0
<b>8H</b>	<b>12H</b>	21,3	21,9	21,9	22,4	23,0	22,3	22,8	22,8	23,3	23,9
<b>12H</b>	<b>4H</b>	20,8	21,6	21,3	22,1	22,6	21,8	22,6	22,4	23,1	23,7
<b>12H</b>	<b>6H</b>	21,2	21,8	21,7	22,4	22,9	22,2	22,8	22,7	23,3	23,9
<b>12H</b>	<b>8H</b>	21,3	21,8	21,9	22,4	23,0	22,2	22,8	22,8	23,3	23,9

UGR values are corrected for lamp flux of 3800 lm by 4,6

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Luminance [cd/m<sup>2</sup>] TTP 70 LINE L1180 TUP 840 SRT/MID 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	6826,67	6841,38	7209,01	7855,85	8868,47	10334,8	12758,7	10334,8	8868,47
50,00	6364,11	6144,12	6366,11	7077,92	8095,82	9645,88	12298,4	9645,88	8095,82
55,00	5431,06	5790,32	5861,62	6126,36	7253,23	8696,59	11557,5	8696,59	7253,23
60,00	4830,47	4713,50	5139,44	5517,80	6199,64	7744,62	10648,5	7744,62	6199,64
65,00	3742,95	3794,40	3968,59	4699,81	5094,51	6552,26	9423,06	6552,26	5094,51
70,00	2990,03	3032,40	3162,97	3391,36	4173,30	5088,58	7736,89	5088,58	4173,30
75,00	2217,45	2203,73	2357,85	2573,86	2959,13	3434,39	5735,87	3434,39	2959,13
80,00	1420,37	1440,79	1542,02	1689,06	1901,98	2094,77	3615,52	2094,77	1901,98
85,00	712,93	698,36	783,81	849,17	1052,63	1137,83	1805,29	1137,83	1052,63

G/C [cd/	135,00	150,00	165,00	180,00	195,00	210,00	225,00	240,00	255,00
45,00	7855,85	7209,01	6841,38	6826,67	6841,38	7209,01	7855,85	8868,47	10334,8
50,00	7077,92	6366,11	6144,12	6364,11	6144,12	6366,11	7077,92	8095,82	9645,88
55,00	6126,36	5861,62	5790,32	5431,06	5790,32	5861,62	6126,36	7253,23	8696,59
60,00	5517,80	5139,44	4713,50	4830,47	4713,50	5139,44	5517,80	6199,64	7744,62
65,00	4699,81	3968,59	3794,40	3742,95	3794,40	3968,59	4699,81	5094,51	6552,26
70,00	3391,36	3162,97	3032,40	2990,03	3032,40	3162,97	3391,36	4173,30	5088,58
75,00	2573,86	2357,85	2203,73	2217,45	2203,73	2357,85	2573,86	2959,13	3434,39
80,00	1689,06	1542,02	1440,79	1420,37	1440,79	1542,02	1689,06	1901,98	2094,77
85,00	849,17	783,81	698,36	712,93	698,36	783,81	849,17	1052,63	1137,83

G/C [cd/	270,00	285,00	300,00	315,00	330,00	345,00
45,00	12758,7	10334,8	8868,47	7855,85	7209,01	6841,38
50,00	12298,4	9645,88	8095,82	7077,92	6366,11	6144,12
55,00	11557,5	8696,59	7253,23	6126,36	5861,62	5790,32
60,00	10648,5	7744,62	6199,64	5517,80	5139,44	4713,50
65,00	9423,06	6552,26	5094,51	4699,81	3968,59	3794,40
70,00	7736,89	5088,58	4173,30	3391,36	3162,97	3032,40
75,00	5735,87	3434,39	2959,13	2573,86	2357,85	2203,73
80,00	3615,52	2094,77	1901,98	1689,06	1542,02	1440,79
85,00	1805,29	1137,83	1052,63	849,17	783,81	698,36

## HEADQUARTERS

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