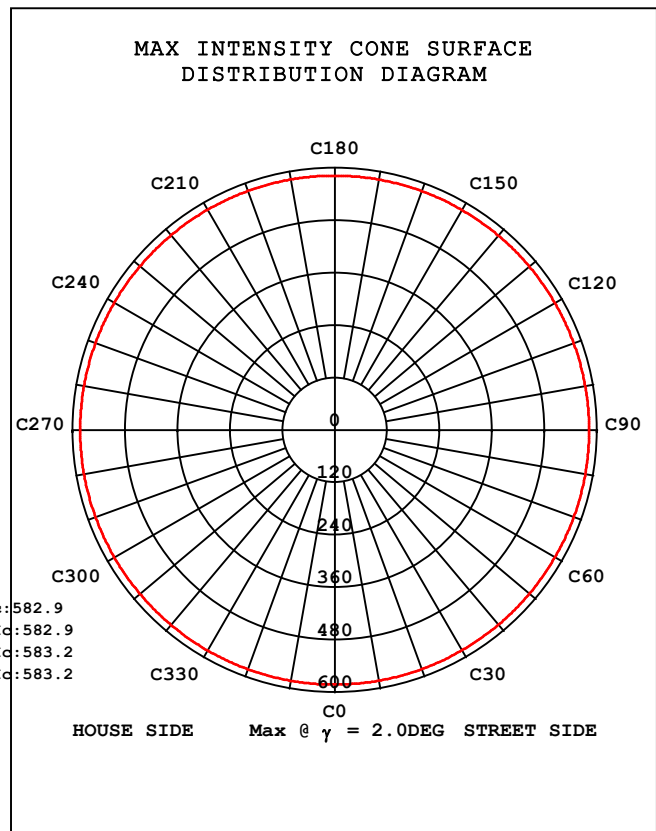
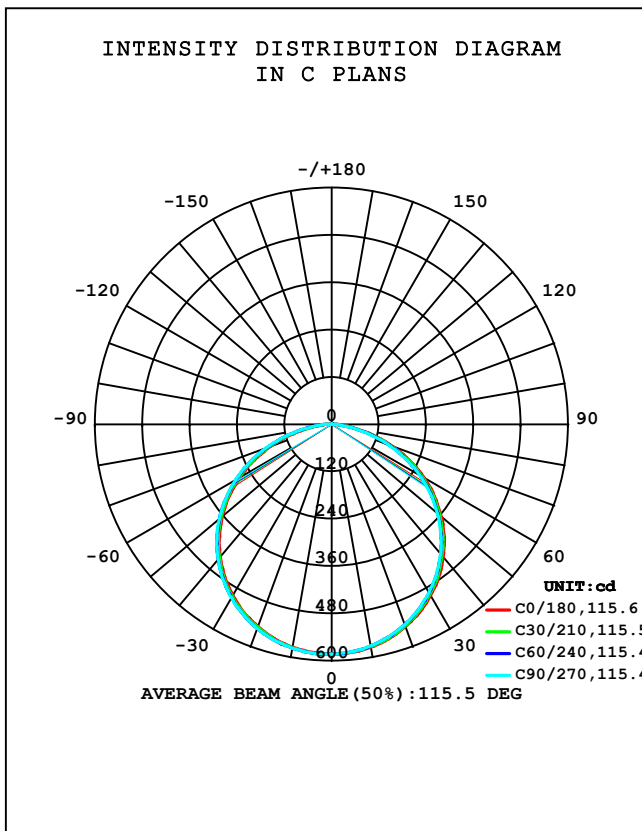


STREETLIGHT PHOTOMETRIC TEST REPORT

NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 93.04 lm/W			
MODELEKF4219HL90-2835-240P		Imax (cd)	583.2	η street_up (%)	0.0
NOMINAL POWER (W)		LOR (%)	100.0	η street_down (%)	48.9
RATED VOLTAGE (V)	DC12	TOTAL FLUX (lm)	1710	η house_up (%)	0.0
NOMINAL FLUX (lm)	1710.24	MAXIMUM @ (C, γ)	270, 2.0	η house_down (%)	51.1
LAMPS INSIDE	1	η up (%)	0.0	76 FLASHAREA (m2)	0.00100
TEST VOLTAGE (V)	DC12	η down (%)	100.0	SLI	17.109

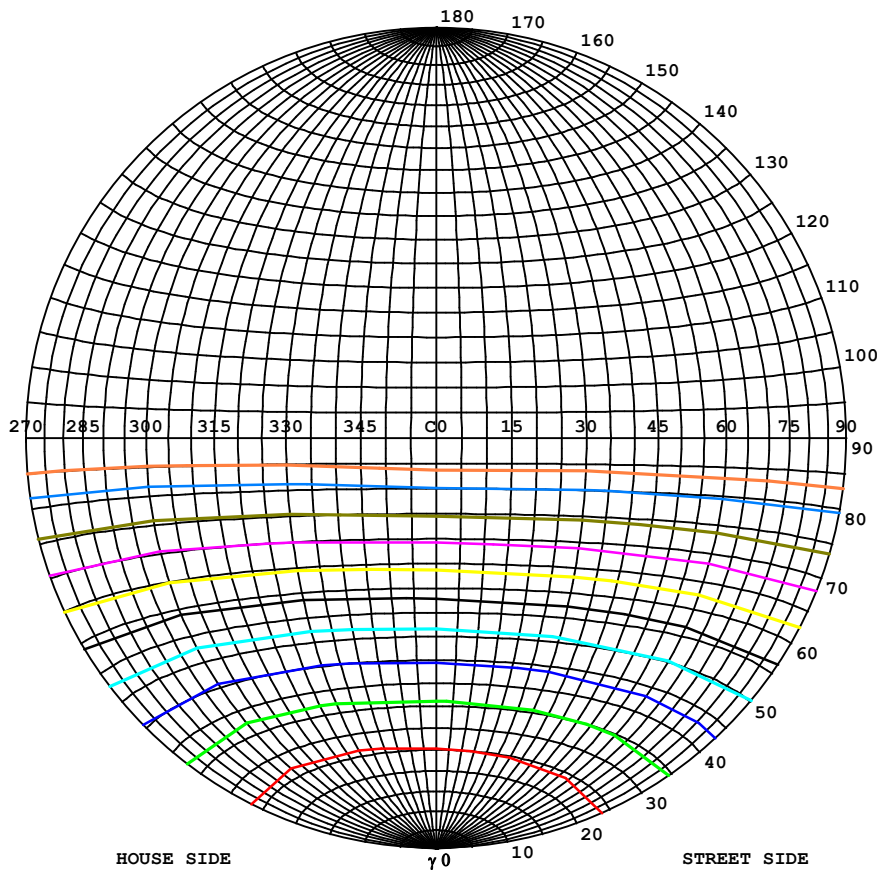


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:QC01
 Test Date:2021-09-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.702m [K=1.0000]
 Remarks: EKF4219HL90
 DC12V IP20 2835-240P
 3000K

STREETLIGHT ISOCANDELA DIAGRAM

NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:



Classification:

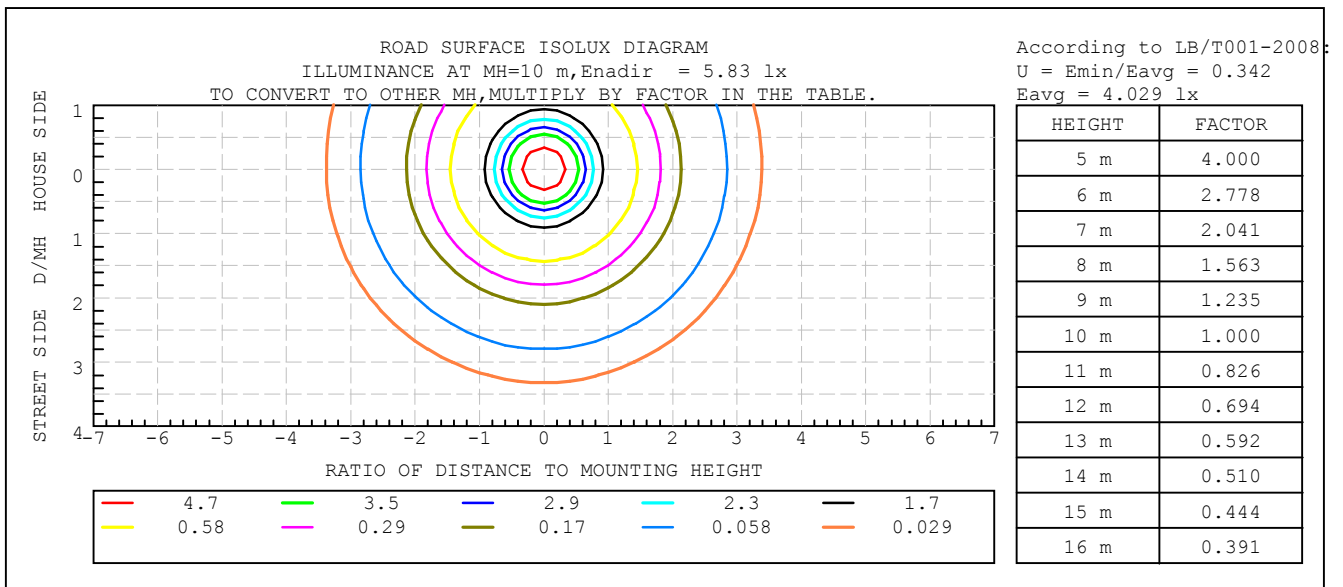
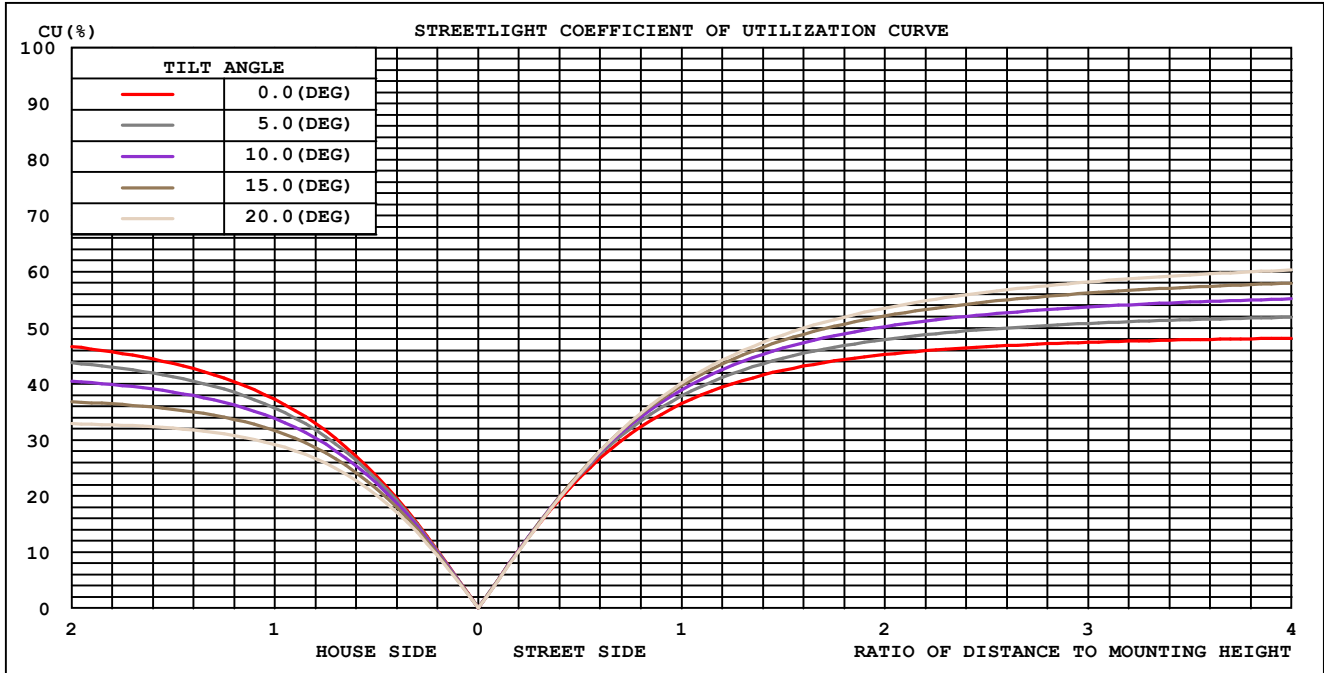
IES:Type V - Very Short
 CIE:Narrow - Short
 IES:Cut-off
 CIE:Semi-cut-off
 Max.At80:42.88cd/klm
 Max.At90:1.844cd/klm
 Max.80-90:42.88cd/klm
 NRB 5101:Limited[5.9%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	583
90%	525
80%	467
70%	408
60%	350
50%	292
40%	233
30%	175
20%	117
10%	58
5%	29

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:QC01
 Test Date:2021-09-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.702m [K=1.0000]
 Remarks: EKF4219HL90
 DC12V IP20 2835-240P
 3000K

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: DEG
Operators: QC01
Test Date: 2021-09-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity: 65.0%
Test Distance: 8.702m [K=1.0000]
Remarks: EKF4219HL90
DC12V IP20 2835-240P
3000K

ZONAL FLUX DIAGRAM

NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:

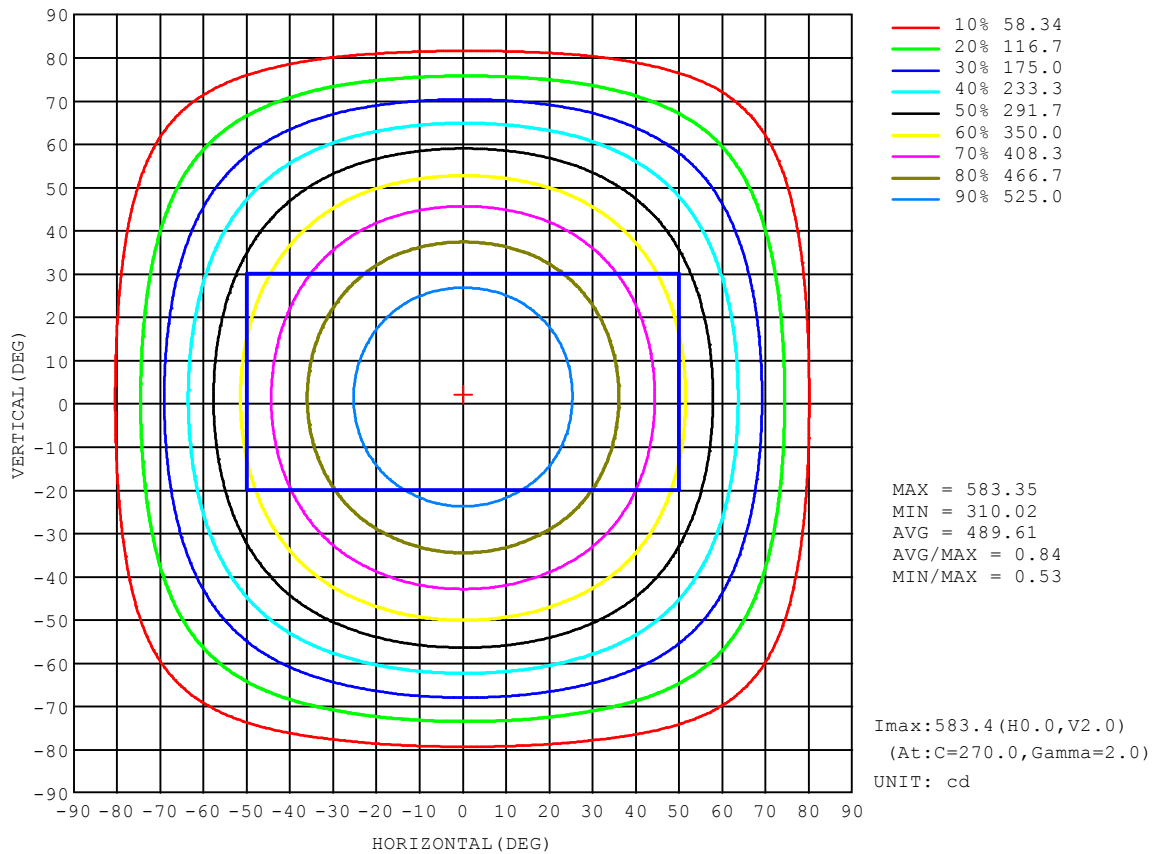
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	573.8	571.9	570.9	571.8	573.8	575.6	576.4	575.8	0- 10	55.21	55.21	3.23,3.23
20	546.5	542.8	541.0	542.4	546.5	550.0	551.7	550.9	10- 20	158.8	214.0	12.5,12.5
30	502.2	496.6	493.5	495.8	501.9	506.8	508.9	507.9	20- 30	242.6	456.6	26.7,26.7
40	440.5	433.6	429.9	432.4	440.2	446.0	448.8	447.7	30- 40	295.8	752.4	44,44
50	363.5	355.5	351.0	353.6	362.6	369.1	372.4	371.3	40- 50	310.7	1063	62.2,62.2
60	270.4	262.2	257.1	259.8	269.2	276.9	281.5	279.6	50- 60	283.7	1347	78.8,78.8
70	166.1	158.6	154.0	156.0	165.1	173.5	178.2	176.3	60- 70	216.2	1563	91.4,91.4
80	59.28	56.55	52.76	54.37	61.95	68.55	72.49	71.21	70- 80	119.2	1682	98.4,98.4
90	0.0105	1.400	0.1077	0.9357	0.5428	2.672	1.551	3.075	80- 90	27.83	1710	100,100
100	0	0	0	0	0	0	0	0	90-100	0.1511	1710	100,100
110	0	0	0	0	0	0	0	0	100-110	0	1710	100,100
120	0	0	0	0	0	0	0	0	110-120	0	1710	100,100
130	0	0	0	0	0	0	0	0	120-130	0	1710	100,100
140	0	0	0	0	0	0	0	0	130-140	0	1710	100,100
150	0	0	0	0	0	0	0	0	140-150	0	1710	100,100
160	0	0	0	0	0	0	0	0	150-160	0	1710	100,100
170	0	0	0	0	0	0	0	0	160-170	0	1710	100,100
180	0	0	0	0	0	0	0	0	170-180	0	1710	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:QC01
Test Date:2021-09-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.702m [K=1.0000]
Remarks: EKF4219HL90
DC12V IP20 2835-240P
3000K

ISOCANDELA DIAGRAM

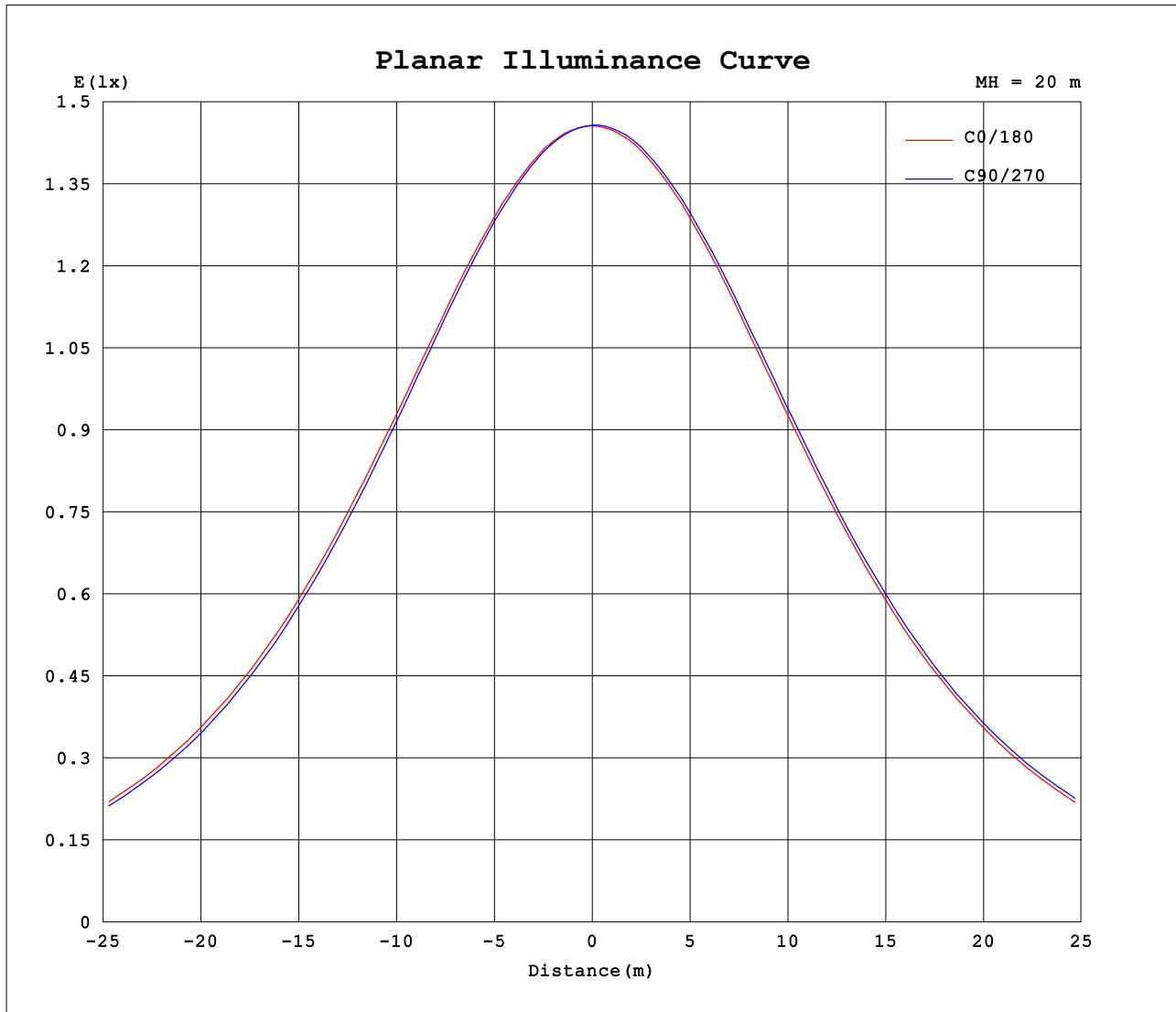
NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:QC01
Test Date:2021-09-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.702m [K=1.0000]
Remarks: EKF4219HL90
DC12V IP20 2835-240P
3000K

Planar Illuminance Curve



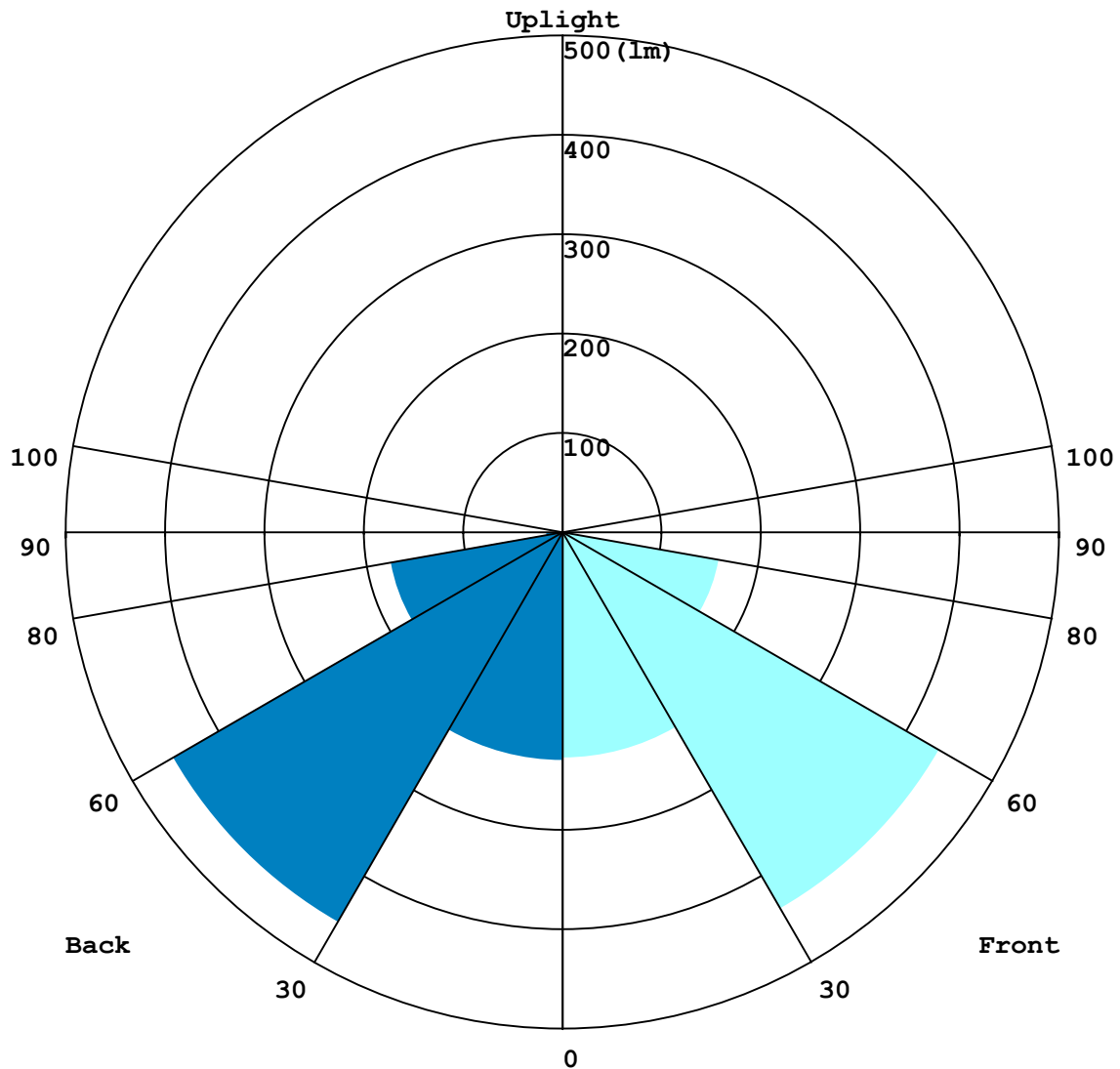
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: DEG
 Operators: QC01
 Test Date: 2021-09-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
 Humidity: 65.0%
 Test Distance: 8.702m [K=1.0000]
 Remarks: EKF4219HL90
 DC12V IP20 2835-240P
 3000K

LCS REPORT

NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:QC01
Test Date:2021-09-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.702m [K=1.0000]
Remarks: EKF4219HL90
DC12V IP20 2835-240P
3000K

BUG REPORT

NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	226.86	13.3
FM - Front-Medium(30-60)	437.46	25.6
FH - Front-High(60-80)	159.93	9.4
FVH - Front-Very High(80-90)	11.571	0.7
Total Forward Light	835.86	48.9

BL - Back-Low(0-30)	229.76	13.4
BM - Back-Medium(30-60)	452.77	26.5
BH - Back-High(60-80)	175.49	10.3
BVH - Back-Very High(80-90)	16.255	1.0
Total Back Light	874.38	51.1

UL - Uplight-Low(90-100)	0.1511	0.0
UH - Uplight-High(100-180)	0	0.0
Total Up Light	0.1511	0.0

BUG(Back,Up,Glare) Rating	B1-U1-G1
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	874.27	0.11288	874.38
Street Side	835.82	0.038223	835.86

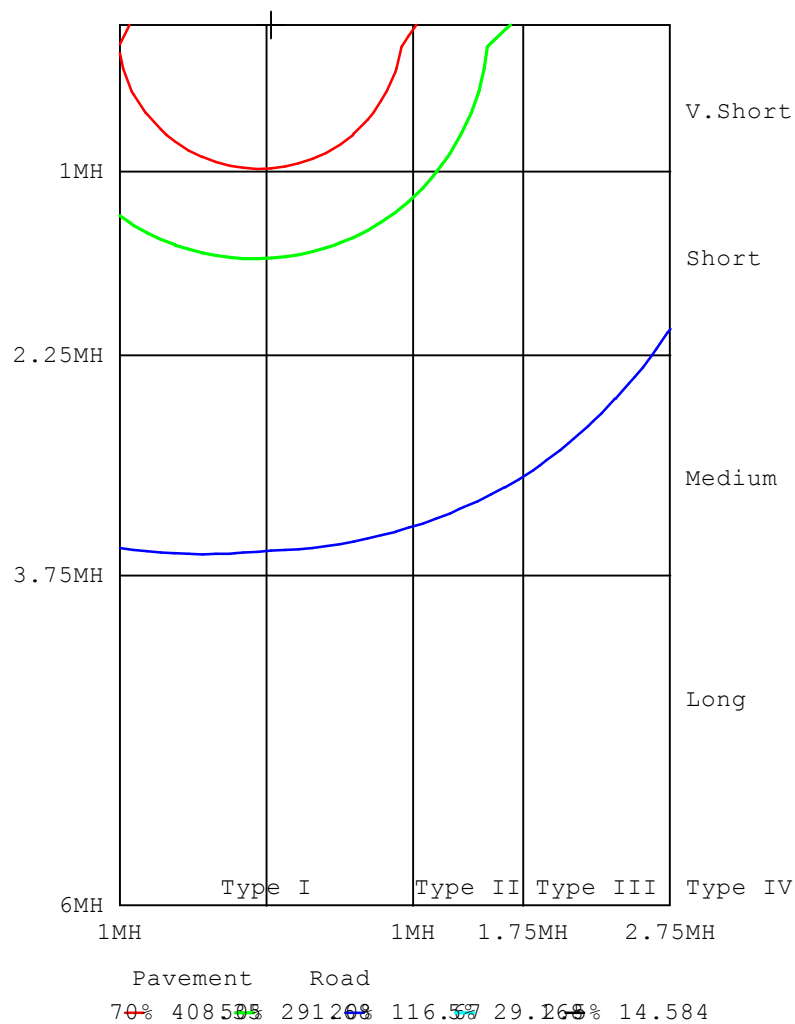
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:QC01
Test Date:2021-09-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.702m [K=1.0000]
Remarks: EKF4219HL90
DC12V IP20 2835-240P
3000K

ROAD ISOCANDELA REPORT

NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:QC01
Test Date:2021-09-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.702m [K=1.0000]
Remarks: EKF4219HL90
DC12V IP20 2835-240P
3000K

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: EKF4219HL90	TYPE:3000K	WEIGHT:0.633
SPEC.:	DIM.: 1000MM	SERIAL No.:
MFR.:	SUR.:0.98x0.073	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	583	583	583	583	583	583	583	583	583	583	583	583						
5	581	580	579	579	579	580	581	581	582	582	582	581						
10	574	572	571	571	571	572	574	575	576	576	576	575						
15	563	561	558	558	559	560	563	564	566	566	566	565						
20	546	544	541	541	541	544	547	549	551	552	552	550						
25	527	523	520	519	520	523	526	529	532	533	533	531						
30	502	499	495	494	494	498	502	505	508	509	509	507						
35	474	470	465	464	464	468	473	477	480	481	482	478						
40	440	436	431	430	430	435	440	444	448	449	450	446						
45	404	399	393	392	392	397	403	407	412	413	413	410						
50	363	359	352	351	351	356	363	367	372	372	373	369						
55	319	313	308	305	306	311	318	322	328	329	330	325						
60	270	265	259	257	258	262	269	274	280	282	282	278						
65	220	214	208	207	207	211	218	224	229	231	232	227						
70	166	161	156	154	154	158	165	171	176	178	179	174						
75	110	109	103	102	101	105	112	117	123	124	125	120						
80	59.3	59.0	54.1	52.8	52.5	56.2	61.9	65.8	71.3	72.5	73.3	69.1						
85	19.3	20.7	16.7	15.2	15.9	18.8	22.4	25.1	28.3	28.8	29.9	27.4						
90	0.01	1.87	0.93	0.11	0.65	1.22	0.54	2.77	2.57	1.55	3.00	3.15						
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:DEG
Operators:QC01
Test Date:2021-09-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:8.702m [K=1.0000]
Remarks: EKF4219HL90
DC12V IP20 2835-240P
3000K